Montana Dept of 636.294 Fish, Wildlife, F2gvgf and Parks Region 1997 Draft environmental assessment, Green Velvet Game Farm

DRAFT

ENVIRONMENTAL ASSESSMENT

GREEN VELVET GAME FARM NEAR BUTTE, MONTANA



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Montana Department of Fish, Wildlife and Parks Region 2 3201 Spurgin Road Missoula, Montana 59801





3201 Spurgin Road Missoula, MT 59804 July 16, 1997

Dear Interested Party:

Enclosed you will find for your review the Draft Environmental Assessment for the Green Velvet Game Farm.

If approved this game farm would encompass approximately 25 acres. The game farm is located approximately 10 miles northwest of Butte, MT. in Telegraph Gulch.

This proposal requires the issuance of a new game farm license for the proposed site. It also requires an environmental assessment in compliance with the Montana Environmental Policy Act.

Public review of the draft environmental assessment will be from July 15, 1997 through August 8, 1997. A public meeting will be held on July 30, 1997 at 7:00 PM at the Butte Forest Service building. This office will accept public comment until August 8, 1997. Following the comment period, FWP will make a decision on the issuance of a game farm license for the Green Velvet Game Farm.

To comment or get more information, contact the Missoula FWP office at the above address or phone number 542-5500.

Thank you for your consideration.

) och

Warden Captain



TABLE OF CONTENTS

	Y									
IN.	TRODUCTION									
	Objectives					 				 1
	Public Participa									
PF	ROPOSED ACTION A									
	Proposed Actio	n				 				 2
	Alternatives									
	Purpose and No	eed of the Pro	oposed A	ction		 				 2
	Role of FWP ar									
AF	FECTED ENVIRON	MENT				 				5
	Land Resource									
	Water Resource									
	Vegetation									
	Fish and Wildlif									
EN	IVIRONMENTAL CO									
L,	Land Resource									
	Water Resource									
	Vegetation									
	_									
	Fish and Wildlif									
	Cultural and Hi									
	Cumulative Effe									
EA	CONCLUSION									_
EA	Mitigation Meas					 	• • • •	• •	• • •	 9
PART I. (Mitigation Meas	sures	TION INF	ORMATI	ON	 	• • • •	• • •		 . 13
PART I. (Mitigation Meass SAME FARM LICENS ENVIRONMENTAL F	sures SE APPLICA' REVIEW	TION INF	ORMATI	ON	 	• • • •	• • •		 . 13
PART I. (Mitigation Mease GAME FARM LICENT ENVIRONMENTAL F HYSICAL ENVIRONN	SE APPLICA SE APPLICA REVIEW MENT	TION INF	ORMATI	ON	 				 . 13
PART I. (Mitigation Mease GAME FARM LICENS ENVIRONMENTAL F HYSICAL ENVIRONM Land Resource	SURES SE APPLICA REVIEW MENT SS	TION INF	ORMATI	ON	 				 . 13 . 16
PART I. (Mitigation Mease SAME FARM LICENT ENVIRONMENTAL F HYSICAL ENVIRONM Land Resource Air Resources	SURES SE APPLICAT REVIEW MENT PS	TION INF	ORMATI	ON	 				 . 13 . 16 . 17 . 19
PART I. (Mitigation Mease GAME FARM LICENT ENVIRONMENTAL FOR THE STATE OF THE	SE APPLICA REVIEW MENT s es	TION INF	ORMATI	ON	 				 . 13 . 16 . 17 . 19
PART I. (Mitigation Mease GAME FARM LICENT ENVIRONMENTAL FOR THE STATE OF THE	SE APPLICA REVIEW MENT s es	TION INF	ORMATI	ON	 				. 13 . 16 . 17 . 19 . 21
PART II. (PH	Mitigation Mease GAME FARM LICENT ENVIRONMENTAL F HYSICAL ENVIRONM Land Resource Air Resources Water Resource Vegetation Fish and Wildlit	SURES SE APPLICA REVIEW MENT S es	TION INF	ORMATI	ON	 				. 13 . 16 . 17 . 19 . 21
PART II. (PH	Mitigation Mease SAME FARM LICENT ENVIRONMENTAL FOR THE STATE OF THE	SURES SE APPLICATE REVIEW MENT SS es fe	TION INF	ORMATI	ON	 				. 13 . 16 . 17 . 19 . 21 . 24
PART II. (PH	Mitigation Mease GAME FARM LICENT ENVIRONMENTAL FOR THE STATE OF THE	SE APPLICA REVIEW MENT SS es fe	TION INF	ORMATI	ON	 				. 13 . 16 . 17 . 19 . 21 . 24 . 26
PART II. (PH	Mitigation Mease GAME FARM LICENT ENVIRONMENTAL FOR THE STATE OF THE	SE APPLICA REVIEW MENT S S S S S S S S S S S S S S S S S S S	TION INF	ORMATI	ON					. 13 . 16 . 17 . 19 . 21 . 24 . 26
PART II. (PH	Mitigation Mease GAME FARM LICENT ENVIRONMENTAL FOR THE STATE OF THE	SE APPLICA REVIEW MENT SS es fe NT	TION INF	ORMATI	ON					. 13 . 16 . 17 . 19 . 21 . 24 . 26
PART II. (PH	Mitigation Mease GAME FARM LICENT ENVIRONMENTAL FOR THE STATE OF THE	SE APPLICA REVIEW MENT SS es fe xards zards	TION INF	ORMATI	ON					. 13 . 16 . 17 . 19 . 21 . 24 . 26 . 30 . 31 . 32
PART II. (PH	Mitigation Mease GAME FARM LICENT ENVIRONMENTAL FOR THE STATE OF THE	SE APPLICA REVIEW MENT SS es fe NT zards s and Taxes	TION INF	ORMATI	ON					. 13 . 16 . 17 . 21 . 24 . 26 . 30 . 31 . 32
PART II. (PH	Mitigation Mease GAME FARM LICENT ENVIRONMENTAL FOR THE STAND RESOURCE AIR RESOURCE Vegetation Fish and Wildliff JMAN ENVIRONMENT Noise Effects . Land Use Risk/Health Ha Community Impublic Services Aesthetics/Recommunity	SE APPLICA REVIEW MENT SS es fe ATT Zards Sand Taxes reation	TION INF	ORMATI	ON					. 13 . 16 . 17 . 21 . 24 . 26 . 30 . 31 . 32 . 33
PART II. (PH	Mitigation Mease GAME FARM LICENT ENVIRONMENTAL FOR THE STAND RESOURCE AIR RESOURCE Vegetation Fish and Wildlift JMAN ENVIRONMEN Noise Effects . Land Use Risk/Health Ha Community Impublic Services Aesthetics/Recoultural and Hi	SE APPLICA REVIEW MENT SSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSS	TION INF	ORMATI	ON					. 13 . 16 . 17 . 21 . 24 . 26 . 30 . 31 . 32 . 33 . 34 . 35
PART II. PH	Mitigation Mease GAME FARM LICENT ENVIRONMENTAL FOR STATE AND ST	SE APPLICA REVIEW MENT SS SS SS A ST. A ST.	TION INF	ORMATI	ON					. 13 . 16 . 17 . 19 . 21 . 24 . 26 . 30 . 31 . 32 . 33 . 34 . 35 . 37
PART II. PH	Mitigation Mease GAME FARM LICENT ENVIRONMENTAL FOR THE STAND RESOURCE AIR RESOURCE Vegetation Fish and Wildlift JMAN ENVIRONMEN Noise Effects . Land Use Risk/Health Ha Community Impublic Services Aesthetics/Recoultural and Hi	SE APPLICA REVIEW MENT SS SS SS A ST. A ST.	TION INF	ORMATI	ON					. 13 . 16 . 17 . 19 . 21 . 24 . 26 . 30 . 31 . 32 . 33 . 34 . 35 . 37
PART II. PI	Mitigation Measures ENVIRONMENTAL F HYSICAL ENVIRONM Land Resources Air Resources Water Resource Vegetation Fish and Wildlif JMAN ENVIRONMEN Noise Effects . Land Use Risk/Health Ha Community Imp Public Services Aesthetics/Rec Cultural and Hi Summary JMMARY EVALUATI	SE APPLICA REVIEW MENT SS	TION INF	CORMATI	ON					. 13 . 16 . 17 . 21 . 24 . 26 . 30 . 31 . 32 . 33 . 34 . 35 . 37
PART II. PI	Mitigation Mease GAME FARM LICENT ENVIRONMENTAL FOR STATE AND ST	SE APPLICA REVIEW MENT SS	TION INF	CORMATI	ON					. 13 . 16 . 17 . 21 . 24 . 26 . 30 . 31 . 32 . 33 . 34 . 35 . 37
PART II. PH	Mitigation Measures ENVIRONMENTAL F HYSICAL ENVIRONM Land Resources Air Resources Water Resource Vegetation Fish and Wildlif JMAN ENVIRONMEN Noise Effects . Land Use Risk/Health Ha Community Imp Public Services Aesthetics/Rec Cultural and Hi Summary JMMARY EVALUATI	SE APPLICA REVIEW MENT SS	TION INF	CORMATI	ON					. 13 . 16 . 17 . 21 . 24 . 26 . 30 . 31 . 32 . 33 . 34 . 35 . 37



TABLE OF CONTENTS -- Continued

FIGURES

FIGURE 1 FIGURE 2 FIGURE 3 FIGURE 4	Green Velvet Game Farm Location Map Site Map and Land Ownership Winter Range Land Use and Land Cover 7
	APPENDICES

Fish, Wildlife and Parks Fencing Requirements Private Property Assessment Act Checklist

APPENDIX A APPENDIX B

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ENVIRONMENTAL ASSESSMENT GREEN VELVET GAME FARM

SUMMARY

INTRODUCTION

The Montana Department of Fish, Wildlife and Parks (FWP) is required to perform an environmental analysis in accordance with the Montana Environmental Policy Act (MEPA) for "each proposal for projects, programs, legislation, and other major actions of state government significantly affecting the quality of the human environment" (Administrative Rules of Montana [ARM] 12.2.430). This Environmental Assessment (EA) satisfies the requirement to perform an analysis. FWP's decision options include approving the Green Velvet application (as stated in the Proposed Action) for licensing a new game farm, approving alternatives to the Proposed Action which mitigate environmental impacts, approving the Proposed Action with stipulations to mitigate environmental impacts, or denying the license application. Based on the environmental evaluation of the Green Velvet game farm application, FWP has prepared this mitigated EA.

OBJECTIVES

This EA has been prepared to serve the following purposes in accordance with FWP MEPA rules ARM 12.2.430:

- to ensure that FWP use natural and social sciences in planning and decision-making;
- to be used in conjunction with other agency planning and decision-making procedures to make a determination regarding the Proposed Action;
- to assist in the evaluation of reasonable alternatives and the development of conditions, stipulations, and modifications to the Proposed Action;
- to determine the need to prepare an Environmental Impact Statement (EIS) through an initial evaluation and determination of the significance of impacts associated with the Proposed Action;
- to ensure the fullest appropriate opportunity for public review and comment on the Proposed Action; and
- to examine and document effects of the Proposed Action on quality of the human environment.

PUBLIC PARTICIPATION

Public involvement in the EA process includes the steps necessary to identify and address public concerns. The Draft EA will be available for public review and comment from July 15, 1997 until 5pm August 8, 1997 from the Region 2 FWP office at the address listed below. Address all comments regarding this EA to the same address.

Mr. Rich Clough, Regional Supervisor Fish, Wildlife and Parks 3201 Spurgin Road Missoula, Montana 59801 (406) 542-5504



PROPOSED ACTION AND ALTERNATIVES

PROPOSED ACTION

The FWP received an application in March 1997 to develop a new elk game farm referred to as the Green Velvet game farm. The proposed game farm is located approximately 8 miles northwest of Butte, Montana (**Figure 1**). The Proposed Action consists of a 35-acre elk game farm with separate quarantine and handling facilities within the overall game farm enclosure (**Figure 2**).

The Proposed Action would include placing an initial 7 elk in the game farm with the option of increasing the total to 40 elk in the 35-acre area. The applicant would breed, sell, and dispose of domestic elk in accordance with Montana game farm and disease control requirements stipulated in Montana statute and administrative rules. Fence construction would be in accordance with requirements of FWP under ARM 12.6.1503A (Appendix A) unless a waiver is granted by FWP to construct a game-proof fence of an alternative design.

ALTERNATIVES

One alternative (No Action Alternative) is evaluated in this EA. Under the No Action Alternative, FWP would not issue a license for development of the Green Velvet game farm as proposed. Therefore, no game farm animals would be placed on the proposed game farm site. Implementation of the No Action Alternative would not preclude other activities allowed under local, state and federal laws to take place in the proposed game farm area.

PURPOSE AND NEED OF THE PROPOSED ACTION

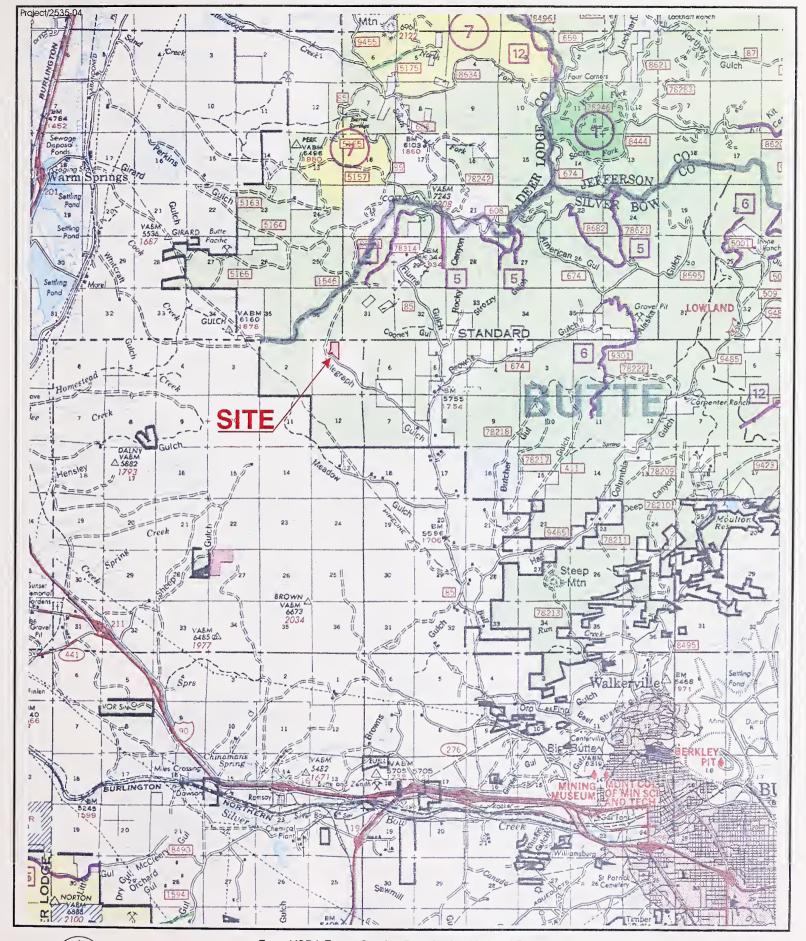
The purpose of the Proposed Action is to establish a new game farm site that would enclose domestic elk. The Green Velvet game farm would be a commercial enterprise that provides elk breeding stock to the game farm market.

ROLE OF FWP AND DEPARTMENT OF LIVESTOCK

FWP is the lead agency in preparing this EA for the proposed project. This document is written in accordance with the Montana Environmental Quality Council (EQC) MEPA Handbook and FWP statutory requirements for preparing an EA under Title 75, Chapter 1, Part 2, Montana Code Annotated (MCA) and FWP rules under ARM 12.2.428 et seq. FWP is required to perform an environmental analysis for proposed projects in accordance with MEPA as stated in the *Introduction* section above.

Regulatory responsibilities for new and expanding game farms are shared with the Montana Department of Livestock (DoL). The DoL is responsible for regulating the health, transportation and identification of game farm animals. During the application process, all applications are submitted to the DoL for approval and inspection of the guarantine facility. No licenses are issued without such approval and inspection.

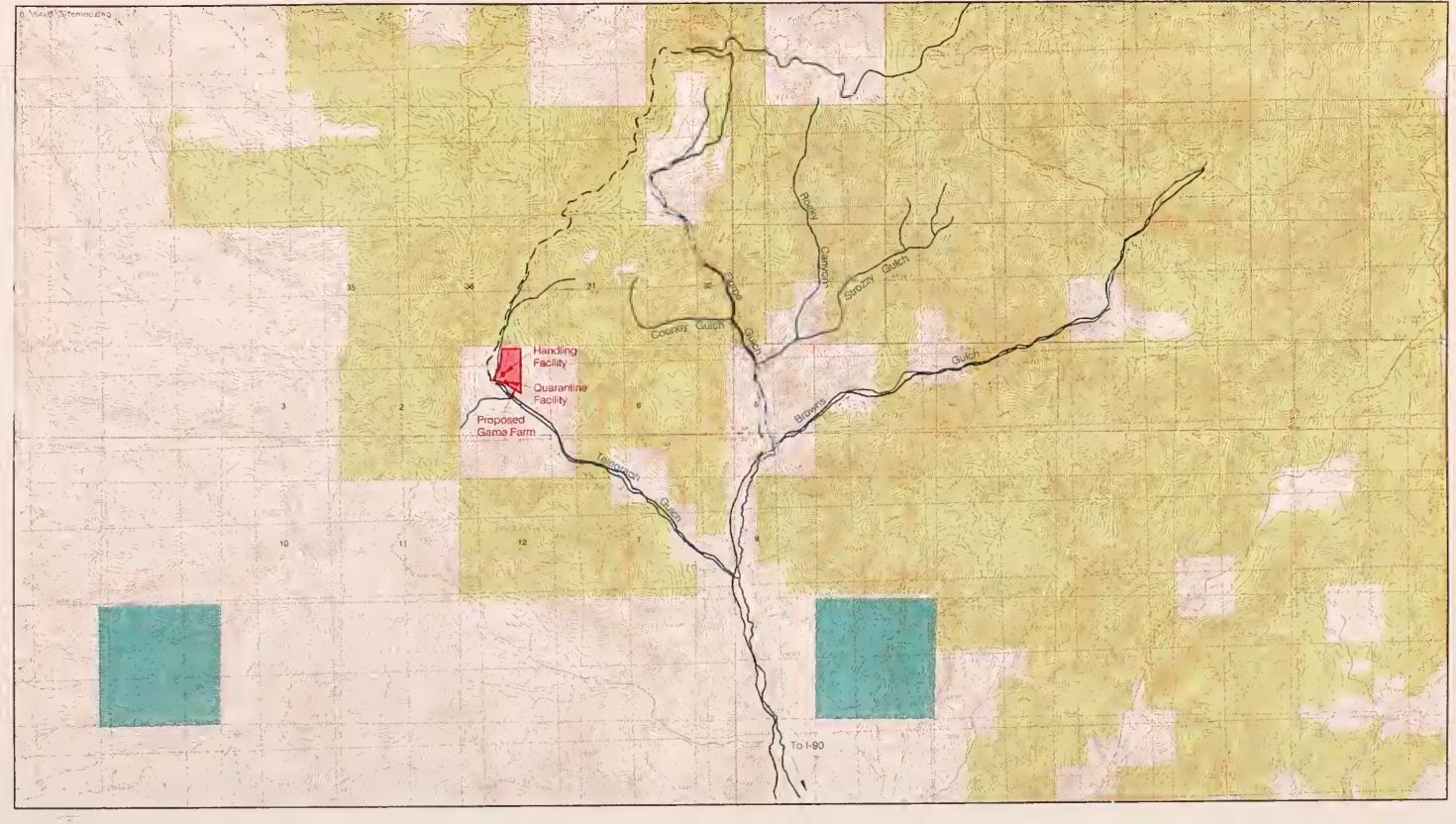






From USDA Forest Service Deer Lodge National Forest









U.S. Forest Service State of Montana Private Note: Ownership Data Derived From Bureau of Land Management Montana Public Lands, 1 100,000 Scale Quadrangles.

Site Map
Proposed Green Velvet Game Farm EA
Silver Bow County, Montana
FIGURE 2



AFFECTED ENVIRONMENT

This section presents brief descriptions of the existing environment potentially affected by the proposed Green Velvet game farm.

LAND RESOURCES

The proposed 35-acre Green Velvet game farm site is located at an elevation of about 6200 feet in the upper portion of Telegraph Gulch. The U.S. Forest Service owns most of the land surrounding the game farm site (Figure 2). Principal land use of the proposed game farm area and vicinity is timber harvesting, wildlife management, and livestock grazing. Telegraph Creek extends along the western side of the proposed game farm enclosure. Approximately two-thirds of the proposed game farm site is gently sloping meadow/pasture land in the valley bottom; the remaining one-third is primarily lodgepole pine forest on the west side of a moderately sloping hill. Soil parent materials are alluvium and colluvium derived from volcanic rocks located in the headwaters and mountains adjacent to and upstream of the proposed game farm. As the soil in the proposed game farm area is host to primarily pasture grasses, the upper surface horizon likely contains an accumulation of organic matter.

WATER RESOURCES

Telegraph creek is a small perennial stream located along the west side of the proposed game farm enclosure (**Figures 3 and 4**). The southwest corner of the game farm would include a short segment of the creek (approximately 300 feet) that would be accessible to the domestic elk. Some areas near Telegraph Creek have seeps on the ground surface due to high groundwater levels and surface water runoff during the spring period; these areas become drier after the spring runoff period. Stock water would be supplied to the domestic elk from Telegraph Creek and from developed springs on the property.

VEGETATION

There are four vegetation types present within the proposed game farm area: pasture, willow/sedge, big sagebrush/grass, and lodgepole pine/grouse whortleberry. The pasture covers the majority of the proposed game farm site in the valley bottom. The willow/sedge riparian community is located along a short section of Telegraph Creek. The big sagebrush type has an understory primarily of introduced grass, with a diversity of native forbs and shrubs. The forest type is on the east side of the proposed pasture and has been recently thinned.

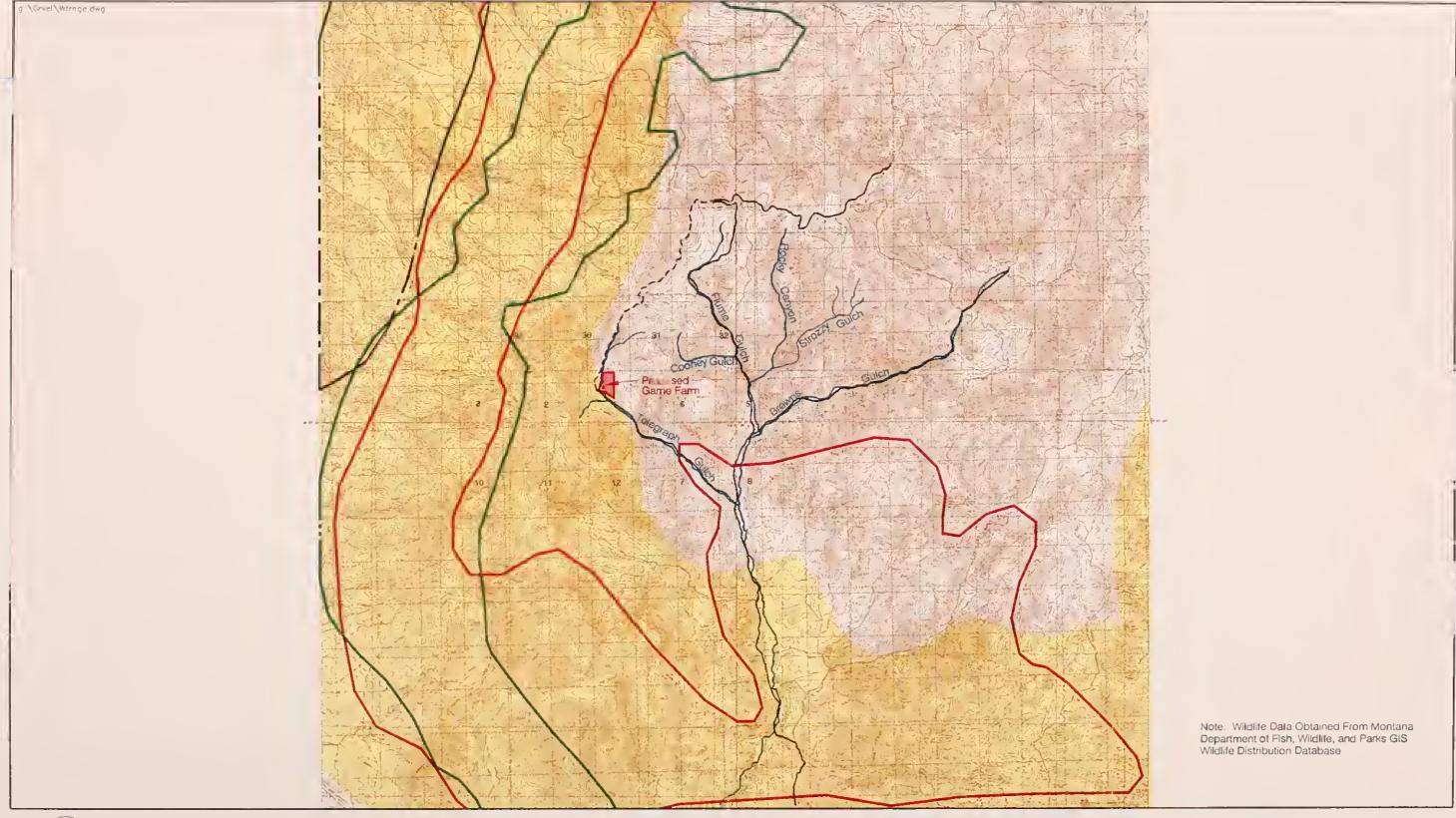
FISH AND WILDLIFE

The proposed game farm area is excellent summer and fall habitat for mule deer and elk, but this habitat is widely distributed and is not critical for any big game species inhabiting this area (**Figure 3**). Moose, black bear, and mountain lions are also known to occur in the vicinity of the game farm site. Although Telegraph Creek may have once been suitable habitat for westslope cutthroat trout, channelization and dewatering of the creek for irrigation probably have eliminated all suitable habitat. Some brook trout may occur in portions of the creek.

ENVIRONMENTAL CONSEQUENCES

Only resources that have potential adverse effects from the Proposed Action are summarized in this section. A detailed discussion of environmental consequences is contained in *Part II* of this EA.

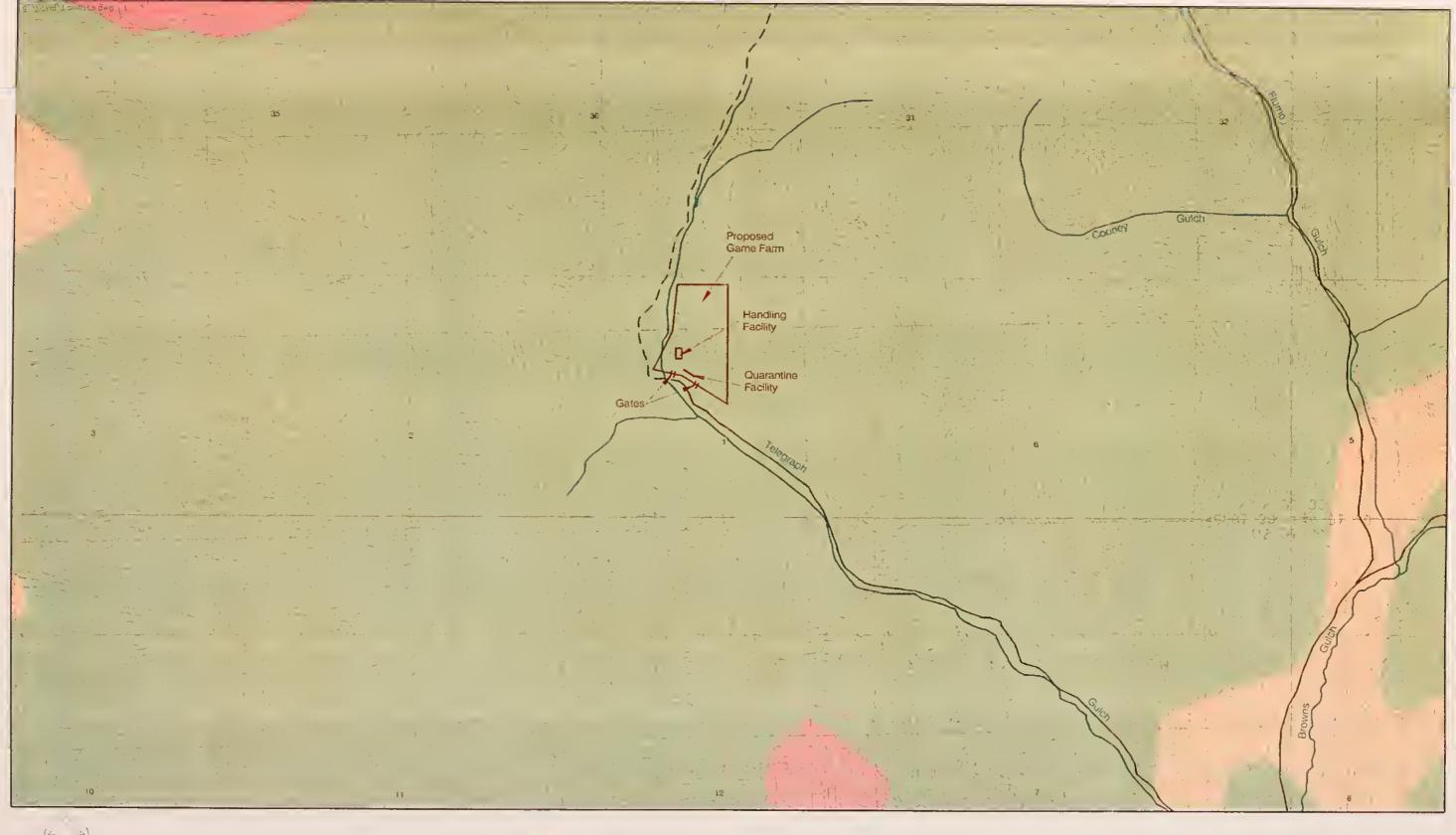




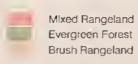












Note: Land Use Information Derived From U.S. Geological Survey's Geographic Information Retrieval And Analysis Files, Land Use/Land Cover.

Most Of Game Farm Site Is Rangeland Meadow Based On Site Visit.

Land Use/Land Cover Proposed Green Velvet Game Farm EA Silver Bow County, Montana FIGURE 4



LAND RESOURCES

Compaction and destruction of soil structure caused by hoof action would occur; the magnitude is dependent on the stocking rate. Areas of saturated soil tend to exacerbate the loss of soil structure due to low soil strength characteristics. A relatively high content of organic matter in the surface horizon tends to mitigate compaction to some extent due to its relatively low bulk density.

Increased streambank erosion from year-round traffic of domestic elk where they would have access to the Telegraph Creek (southwest corner) may lead to increased siltation of the stream and alteration of the stream channel; however, this is expected to be minor due to the small access area and small size of the stream.

WATER RESOURCES

Nutrient-enriched water from elk fecal matter, and sediment from elk traffic erosion may enter Telegraph Creek during major precipitation events and snowmelt. Shallow groundwater in the valley bottom also could be affected by the nutrient-enriched water. These potential impacts, however, are considered minor and should not adversely affect water quality for fishes or other uses.

VEGETATION

Continuous use of game farm pastures would produce vegetative degradation over time, resulting in decreasing vegetation production, reduced ground cover and species diversity, increased soil erosion, and invasion of noxious weeds. Vegetative condition would be dependent on stocking rate in the pasture.

FISH AND WILDLIFE

Although this area is not considered critical habitat for any big game species, the Proposed Action would exclude wild deer and elk from 35 acres of suitable habitat. The impact of this loss is only considered minor because similar habitat is widely available in adjacent areas. The wild deer, elk, and moose living in this area generally winter at lower elevations several miles to the south of the proposed game farm site. Existing open space and the small elevational range of the proposed enclosure would allow easy migration of big game around the proposed expansion.

Domestic elk would have direct access to Telegraph Creek in the southwestern corner of the game farm enclosure. Telegraph Creek appears to no longer have suitable habitat for cutthroat trout due to stream channelization, rock barriers, and irrigation water withdrawals. Some input of nutrient-enriched and sediment-laden water may occur to the Telegraph Creek/Browns Gulch drainage during snowmelt and major storm events; however, because of the large numbers of existing livestock in this drainage, the game farm is not expected to cause adverse effects on water quality for brook trout fisheries.

Spread of contagious wildlife disease from game farm animals may reduce the number of wild deer and elk available for hunting. Hunters also could be exposed to diseases that are contagious to humans.

CULTURAL AND HISTORICAL RESOURCES

One historic site exists in the vicinity of the proposed game farm; however, this historic mining and irrigation system is not located within the game farm fence area. There is a low likelihood for this project to affect unknown or unrecorded cultural properties.



CUMULATIVE EFFECTS

Because no plans for major housing developments, new road building, or logging have been submitted for the upper Telegraph Creek drainage and surrounding area, no cumulative effects are expected from past, present, or reasonably foreseeable activities near the proposed game farm.

EA CONCLUSION

MEPA and the game farm statutes require FWP to conduct an environmental analysis for game farm licensing as described in the *Introduction* section of this EA. FWP prepares EAs to determine whether a project would have a significant effect on the environment. If FWP determines that a project would have a significant impact that could not be mitigated to a level that is less than significant, the FWP would prepare a more detailed EIS before making a decision.

Based on the criteria evaluated in this EA, an EIS will not be required for the proposed Green Velvet game farm. The appropriate level of analysis for the Proposed Action is a mitigated EA because all impacts of the proposed game farm construction and operation have been accurately identified in the EA, and all identified significant impacts would be mitigated to minor or none.

MITIGATION MEASURES

Mitigation measures described in this section address both minor and significant impacts. FWP will require stipulations to mitigate all potentially significant impacts from the Proposed Action. Potential minor impacts from the Proposed Action are addressed as mitigation measures that are strongly recommended to remain in compliance with state and federal environmental regulations, but not required.

Required Stipulations

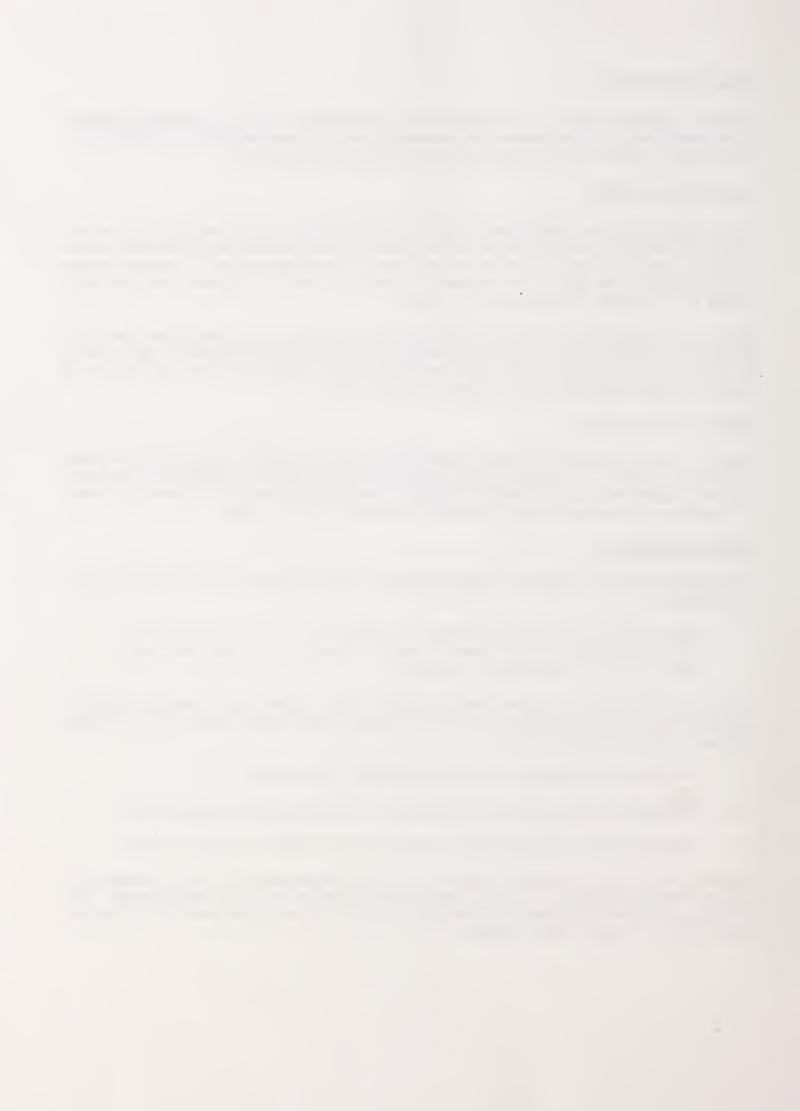
The following stipulation is designed to mitigate significant impacts identified in the EA to below the level of significance:

Report ingress of any wild game animals and predators (i.e., bear, lion, and coyote) or egress of domestic elk to FWP within 24 hours. The report must contain the probable reason why or how ingress/egress occurred.

This stipulation is imposed to mitigate potentially significant risk to wildlife health posed by the proposed game farm. Risk to wildlife health from contact between game farm animals and wild game is potentially significant due to the following factors:

- the site would be located in an area currently utilized by wild game;
- fencing would cross hilly terrain, increasing the risk of wild deer jumping the fence; and
- inadequate plans to address ingress of wild animals (see Section 5 of Part II in this EA).

Information required by the stipulation in the event of ingress or egress would help both the applicant and FWP to address ingress/egress and to minimize contact between wild and domestic animals. This stipulation, in addition to existing FWP fencing and wildlife protection requirements, would effectively reduce the risk to wildlife to below significant.



Recommended Mitigation Measures

The following mitigation measures address minor impacts identified in the EA that are likely to result from the Proposed Action.

Land Resources

Minimize increases in erosion and runoff from disturbed ground by:

maintaining a "reasonable stocking rate" within the game farm enclosure, defined as "the density
of animals appropriate to maintain vegetative cover in pasture condition that minimizes soil erosion
from major precipitation events and snowmelt".

Water Resources

The Montana Department of Environmental Quality (DEQ) administers and enforces water quality laws (e.g., Clean Water Act and Montana Water Quality Act) relating to pollution from point and nonpoint sources. Facilities that qualify as "concentrated animal feeding operations" (CAFO) are considered point sources of pollution and may require permits under Title 75, Chapter 5, Part 6, MCA, and ARM 17.30.1330 (also see 40 CFR § 122.23 and Appendix B to Part 122). Facilities that allow game farm animals access to surface water or that contaminate runoff to surface or groundwater may be considered nonpoint sources of pollution and are subject to the prohibitions against pollution and nondegradation of state water (Title 75, Chapter 5, Parts 3 & 6, MCA, and ARM 17.30.701 et seq.). The following management practices are recommended to minimize the risk of discharging pollutants to state water:

- Minimize stock traffic in saturated soil areas during the spring when groundwater and surface water are highest. Maintain a reasonable stocking rate for elk in the proposed game farm area to mitigate some of the potential erosion and sedimentation impacts as described above under Land Resources. Other water quality impacts could be minimized by moving dead animals and excess fecal material to an approved site that is more isolated from surface water and groundwater (disposal must meet county regulations for solid waste).
- Armor the stream bank and bed of Telegraph Creek with crushed rock, gravel or other appropriate material where the creek is included in the game farm enclosure (southwest corner) to prevent or minimize trampling, erosion, and sedimentation. A water gap also could be constructed to narrow the area that domestic elk could directly access the stream. These mitigation measures, as well as other animal waste management methods, are described in the "Guide to Animal Waste Management and Water Quality Protection in Montana" (DEQ 1996) and "Common Sense and Water Quality, A Handbook for Livestock Producers" (Montana Department of Health and Environmental Sciences, 1994). Permits may be required for work performed in and adjacent to Telegraph Creek (see Water Resources section in Part II of this EA).
- Locate the western side of the game farm perimeter fence adjacent to Telegraph Creek at least 25 feet from the edge of the channel to prevent direct impacts to the creek and adjacent wetland areas. This requirement does not apply to the southwest corner of the game farm area that crosses and includes Telegraph Creek.
- Control surface water runoff discharges to Telegraph Creek by employing best management practices (BMPs) along the fence line where surface water runoff could directly enter the creek. The BMPs may include earth berms, straw bale dikes, vegetative buffer zones, and/or silt fences.



Vegetation

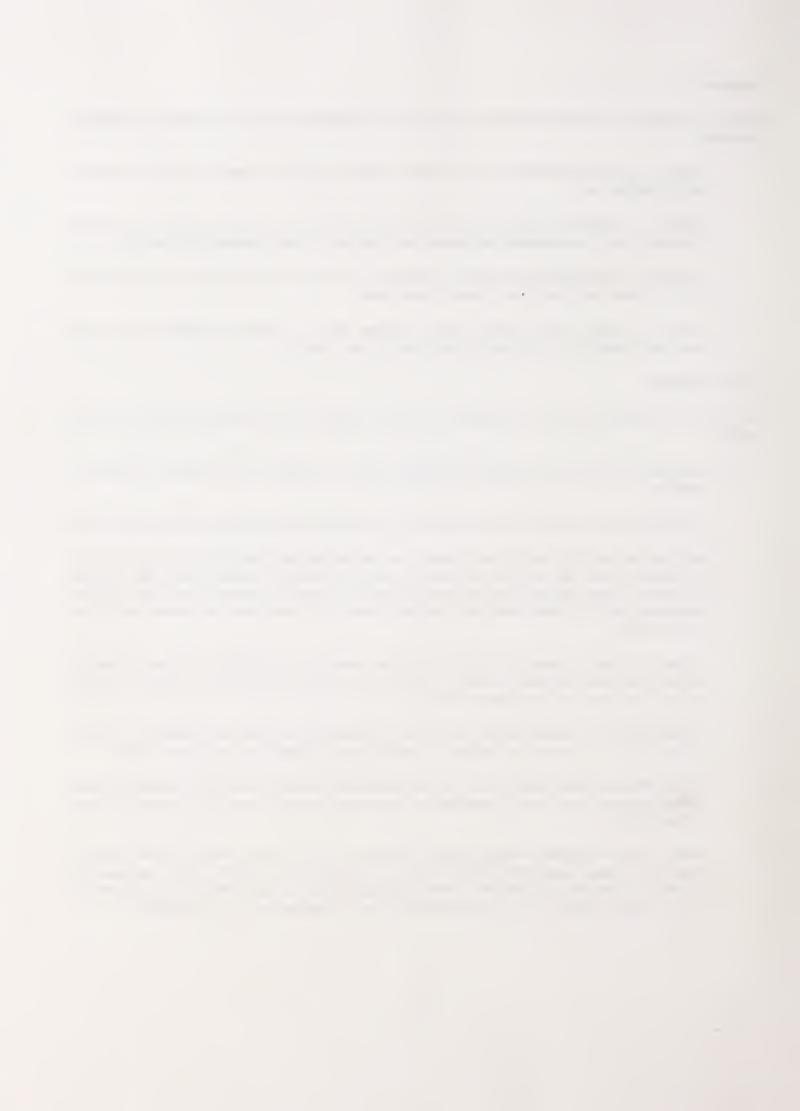
Effects on vegetation from the Proposed Action can be mitigated by using the following mitigation measures:

- Utilize a reasonable stocking rate that would maintain adequate vegetative cover to maintain and/or stabilize soil;
- Establish a rest-rotation grazing system within the 35-acre game farm area as elk numbers increase to optimize vegetative productivity and minimize soil and vegetative degradation;
- Feed only certified weed-seed-free hay or pellets and develop a weed control plan in conjunction with the Butte-Silver Bow Weed Control District; and
- Seed and irrigate (where possible) highly disturbed areas to establish vegetative cover which would help stabilize soil and provide new forage for elk grazing.

Fish and Wildlife

The following standard game farm management practices would help to minimize impacts to fish and wildlife:

- Store hay, feed, and salt away from exterior fences or enclose in appropriate containers or buildings.
- Feed game farm animals at interior portions of the enclosure and not along the perimeter fence.
- Remove dead animals, excess fecal material, and waste feed from the game farm and deposit at
 an approved site not likely to be used by humans, domestic animals, and wild animals.
 Alternatively, dead animals could be buried (minimum depth of 2 feet) and fecal matter could be
 composted on site in areas away from Telegraph Creek. Disposal must meet county regulations
 for solid waste.
- Inspect the exterior game farm fence on a regular basis and immediately after events likely to damage the fence to ensure its integrity with respect to trees, frost-heaving, corrosion, burrowing animals, predators, and other game animals.
- If fence integrity or ingress/egress becomes a problem, adjust fence as necessary, including double fencing, increasing post support, replacing damaged posts, or raising fence height.
- During winters of exceptional snow cover, remove snow on either side of the enclosure fence to prevent ingress/egress, or keep game farm animals away from fence areas where significant snow buildup occurs.
- Risk of disease epidemic or heavy parasite infections among domestic elk can be minimized by maintaining a reasonable domestic elk stocking rate in relation to the enclosure size, management of manure in accordance with DEQ (1996) guidance (Guide to Animal Waste Management and Water Quality Protection in Montana), and adherence to disease testing requirements.



Cultural and Historical Resources

If archeological artifacts are observed during construction or operation activities at the game farm, work should stop and the discovery reported to:

Montana Historical Society Historic Preservation Office 1410 8th Avenue; P.O. Box 201202 Helena, Montana 59620 (406) 444-7715

If work stoppage in the area containing observed artifacts is not possible, record the location and position of each object, take photographs, and preserve the artifact(s).



ENVIRONMENTAL ASSESSMENT CHECKLIST

PART I. GAME FARM LICENSE APPLICATION

Montana Department of Fish, Wildlife & Parks' (FWP) authority to regulate game farms is contained in sections 87-4-406 through 87-4-424, Montana Code Annotated (MCA) and Administrative Rules of Montana (ARM) 12.6.1501 through 12.6.1519.

1. Name of Project: Green Velvet Elk Game Farm

Application Date: March 25, 1997

2. Name, Address and Phone Number of Applicant(s):

Clifford & Cindy Perry Box 3483

Butte, Montana 59702

(406) 782-5293

Craig & Loretta Rowe 830 W. Copper Butte, Montana 59701

(406) 723-6749

3. If Applicable:

Estimated Construction/Commencement Date: July 1, 1997

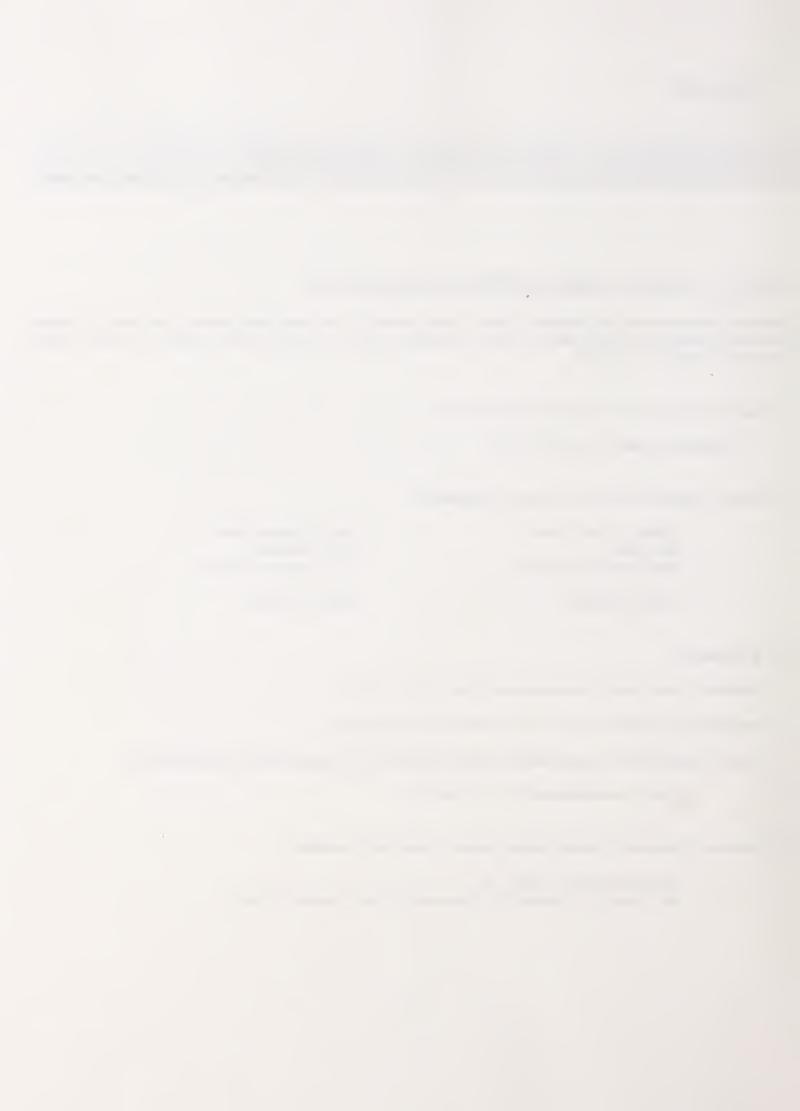
Estimated Completion Date: within 2 years of license approval

Is this an application for expansion of existing facility or is a future expansion contemplated?

This is an application for a new facility.

4. Location Affected by Proposed Action (county, range and township):

Silver Bow County (Figure 1)
Northwest ¼ of Section 01, Township 04 North, Range 09 West



5. Project Size: Estimate the number of acres that would be directly affected that are currently:

(a) Developed:

residential..... ___ acres
industrial..... ___ acres
(b) Open Space/Woodlands.... ___ 10.0 acres

(c) Productive:

irrigated cropland. ___ acres
dry cropland...... ___ acres
forestry....... ___ acres
rangeland meadow... 24.0 acres

6. Map/site plan: The following maps are included in this Environmental Assessment:

Figure 1: Green Velvet Game Farm Location Map

Figure 2: Site Map and Land Ownership

Figure 3: Winter Range

(c) Wetlands/Riparian Areas..... 0.5 acres

Figure 4: Land Use and Land Cover

7. Narrative Summary of Proposed Action or Project including the Benefits and Purpose of Proposed Action:

The Proposed Action consists of developing a new 35-acre elk game farm in Silver Bow County, Montana (**Figure 1**). The proposed game farm would be located approximately 8 miles northwest of Butte in the Telegraph Creek drainage. The game farm application was received by the Montana Department of Fish, Wildlife, and Parks (FWP) from the Perry's and Rowe's (1997a) on March 25, 1997. A modified fence boundary map was received from the applicants on June 24, 1997 (Perry and Rowe, 1997b).

Fence construction would be in accordance with requirements of the Montana FWP (see ARM 12.6.1503A), unless a waiver is granted for an alternative design. The proposed perimeter fence would consist of 8-foot high, high-tensile big game fixed-knot fencing. The fence would be supported by 3-inch diameter steel pipe posts driven approximately 3.5 feet into the soil and spaced at 20-foot intervals. Fence mesh would consist of 6-inch vertical wire stays and 17 horizontal wires (approximately 6-inch square mesh size). Double-latching metal gates with a single lock would be used for access to the enclosure at two locations (**Figure 4**).

Separate quarantine and handling facilities would be located within the 35-acre game farm pasture area (**Figures 2 and 4**). The fence for these facilities would be an 8-foot tall solid wood structure. As of July 14, 1997, no detailed quarantine facility plans for the proposed Green Velvet game farm had been submitted to DoL for review.

The proposed game farm would initially stock seven elk with the option to manage up to 40 elk. The applicant would breed, sell and dispose of game farm elk in accordance with Montana game farm and disease control requirements stipulated in Title 87, Chapter 4, Part 4, MCA and Title 81, Chapter 2, Part 7, MCA.

The proposed game farm property is owned by Clifford and Cindy Perry. Craig and Loretta Rowe are business partners for the proposed game farm operation and do not own or lease any property at the game farm site. Mr. Perry has lived on the property since 1963 and has been involved with cattle ranching for many years. Mr. Perry also has toured several game farms in Montana. The purpose of the game farm is to breed and sell game farm elk. Game farm elk from the Green Velvet game farm would be produced to supply market demand for breeding animals, antlers, and meat production.



8. Listing of any other Local, State or Federal agency that has overlapping or additional jurisdiction:

(a) Permits:

Agency Name Permit Approval Date and Number

Department of Livestock approve quarantine Pending and handling facility

(b) Funding:

Agency Name Funding Amount

None

(c) Other Overlapping or Additional Jurisdictional Responsibilities:

Agency Name Type of Responsibility

Montana Department of Livestock (DoL) disease control, transportation,

identification, & importation

Montana Department of Environmental

Quality (DEQ) water quality

Montana State Historical Preservation

Office (SHPO) cultural resources

Montana Department of Natural Resources

and Conservation (DNRC) water rights

Silver Bow County Conservation District perennial stream disturbance/crossing

Butte-Silver Bow County Planning Dept. fence construction permit

U.S. Army Corps of Engineers direct disturbance of stream & wetlands

9. List of Agencies Consulted During Preparation of the EA:

Montana Department of Livestock

Montana Bureau of Mines and Geology (MBMG)

Montana Department of Environmental Quality

Montana State Historical Preservation Office

Montana Department of Natural Resources and Conservation

Butte-Silver Bow Weed Control District

Butte-Silver Bow County Planning Department

U.S. Forest Service (Beaverhead-Deerlodge National Forest)

References:

Perry, Clifford/Cindy, and Craig/Loretta Rowe, 1997a. Game Farm Application A for the Green Velvet Project. Submitted to Montana Dept. of Fish, Wildlife and Parks. March 25, 1997.

Perry, Clifford/Cindy and Craig/Loretta Rowe, 1997b. Letter and Revised Boundary Map for Green Velvet Game Farm Project. Submitted to Montana Dept. of Fish, Wildlife and Parks. Letter dated June 18, 1997.



PART II. ENVIRONMENTAL REVIEW

This section of the EA presents results of an environmental review of the Proposed Action. The assessment evaluated direct and indirect impacts and cumulative effects of the Proposed Action on the following resources of the physical environment: land, air, water, vegetation, fish and wildlife; and the following concerns of the human environment: noise, land use, human health risk, community impacts, public services and taxes, aesthetics and recreation, and cultural and historical resources. Impacts were determined to fall in one of four categories: unknown, none, minor and significant. For purposes of this EA, and in accordance with ARM 12.2.429 through 12.2.431, these terms are defined as follows:

Cumulative Effects: The collective impacts on the human environment of the Proposed action when considered in conjunction with other past and present actions related to the Proposed Action by location or generic type. Related future actions must also be considered when these actions are under concurrent consideration by any state agency through pre-impact statement studies, separate impacts statement evaluation, or permit processing procedures.

Unknown Impacts: Information is not available to facilitate a reasonable prediction of potential impacts.

Significant Impacts: A determination of significance of an impact in this EA is based on individual and cumulative impacts from the Proposed Action. If the Proposed Action results in significant impacts that can not be effectively mitigated, FWP must prepare an Environmental Impact Statement (EIS). The following criteria are considered in determining the significance of each impact on quality of the physical and human environment:

- severity, duration, geographic extent and frequency of occurrence of the impact;
- probability that the impact will occur if the Proposed action occurs;
- growth-inducing or growth-inhibiting aspects of the impact, including the relationship or contribution
 of the impact to cumulative effects;
- quantity and quality of each environmental resource or value that would be affected, including the uniqueness and fragility of those resources or values;
- importance to the state and to society of each environmental resource or value that would be affected;
- any precedent that would be set as a result of an impact of the Proposed Action that would commit FWP to future actions with significant impacts or a decision in principle about such future actions; and
- potential conflict with local, state, or federal laws, requirements, or formal plans.

Reasonable Stocking Rate: The density of animals appropriate to maintain vegetative cover in pasture condition that minimizes soil erosion from major precipitation events and snowmelt.



Evaluation of Impacts from the Proposed Action, including Secondary and Cumulative Impacts, on the Physical and Human Environment are described below in Check-List format:

PHYSICAL ENVIRONMENT

1. LAND RESOURCES		Potentia	al Impact	Can Impact	_	
Would Proposed Action result in:	Unknown	None	Minor	Significant	be Mitigated	Comment Index
a. Soil instability or changes in geologic substructure?						
b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil which would reduce productivity or fertility?					Yes	1(b)
c. Destruction, covering or modification of any unique geologic or physical features?						
d. Changes in siltation, deposition or erosion patterns that may modify the channel of a river or stream or the bed or shore of a lake?					Yes	1 (d)

AFFECTED ENVIRONMENT:

The proposed Green Velvet game farm is located on 35 acres of generally low relief, gently sloping meadow/pasture land adjacent to Telegraph Creek, a small perennial drainage (Figure 2). A small portion of the proposed game farm area is lodgepole pine primarily along the eastern side-slopes of the valley bottom.

Soil parent materials are alluvium and colluvium derived from volcanic rocks located in the headwaters and mountains adjacent to and upstream of the proposed game farm (Wallace, 1987). As the soil in the proposed game farm area is host to primarily pasture grasses, the upper surface horizon likely contains an accumulation of organic matter. Soils have been mapped as deep, cold, and pale brown (Ross and Hunter, 1976). During a site visit in May 1997, soils were saturated in areas adjacent to the creek.

PROPOSED ACTION:

- 1(b) Compaction and destruction of soil structure caused by hoof action would occur if the stocking rate is not maintained at a reasonable level. The areas of saturated soil tend to exacerbate the loss of soil structure due to low soil strength characteristics. A relatively high content of organic matter in the surface horizon tends to mitigate compaction to some extent due to its relatively low bulk density.
- 1(d) The easy access of livestock to Telegraph Creek previously grazed in the proposed game farm area has caused collapse and erosion of some grassy streambanks. Increased streambank erosion from year-round traffic of domestic elk where they would have access to the stream (southwest corner) may lead to increased siltation of the stream and alteration of the stream channel; however, this is expected to be minor due to the small access area and small size of the stream.

NO ACTION:

Current conditions are not expected to change under the No Action Alternative. If livestock continue to be grazed in the project area, similar impacts described above for the proposed game farm would result under livestock confinement without mitigating measures.



CUMULATIVE EFFECTS:

The proposed Green Velvet game farm is located near the head of Telegraph Gulch and surrounded by Forest Service land on three sides (**Figure 2**). No plans for major housing developments, new road building, or logging have been submitted for the upper Telegraph Creek drainage and surrounding areas. Therefore, no cumulative effects from past, present or reasonably foreseeable activities near the proposed game farm are anticipated.

COMMENTS:

Required Stipulations: None.

Recommended Mitigation Measures:

- 1(b) Maintain a reasonable stocking rate within the game farm enclosures to minimize erosion from disturbed ground. Special care should be taken to minimize traffic in saturated soil areas during the spring when groundwater and surface water levels are highest. A "reasonable stocking rate" is defined on the first page of Part II Environmental Review.
- 1(d) Place crushed rock, gravel, or other appropriate armor material adjacent to and on the bed of Telegraph Creek where domestic elk would have access to the stream in the southwest corner of the game farm. The following permits may be required prior to working in or near Telegraph Creek: "310 Permit" from the local Conservation District; "404 Permit" from the U.S. Army Corps of Engineers; and "3A Authorization" from the Montana DEQ (see Water Resources section 3 in Part II of this EA).

These mitigation measures, as well as other best management practices, may be required by Montana DEQ if it is determined that a "concentrated animal feeding operation" (CAFO) permit is necessary (see Section 3 - Water Resources). Refer to "Common Sense and Water Quality, A Handbook for Livestock Producers" (Montana Department of Health and Environmental Sciences, 1994) for further information on CAFO permits.

REFERENCES:

Montana Department of Health and Environmental Sciences (DHES), 1994. Common Sense an Water Quality, A Handbook for Livestock Producers. Helena, MT.

Ross, R.L. and H.E. Hunter, 1976. Climax Vegetation of Montana Based on Soils and Climate. U.S. Dept. of Agriculture, Soil Conservation Service. Bozeman, MT. 64 pp. June 1976.

Wallace, C.A. 1987. Generalized Geologic Map of the Butte 1 X 2 Degree Quadrangle, Montana. U.S. Geological Survey, 1:250,000 Miscellaneous Field Studies Map MI-1925. Published by the U.S. Geological Survey.



2. AIR RESOURCES		Potenti	al Impact		Can	
Would Proposed Action result in:	Unknown	None	Minor	Significant	Impact be Mitigated	Comment Index
a. Emission of air pollutants or deterioration of ambient air quality?					Yes	2(a)
b. Creation of objectionable odors?					Yes	2(b)
c. Alteration of air movement, moisture, or temperature patterns or any change in climate, either locally or regionally?						
d. Adverse effects on vegetation, including crops, due to increased emissions of pollutants?						

AFFECTED ENVIRONMENT:

The proposed game farm site is located near the head of the Telegraph Creek drainage at the end of a private dirt road. This area is sparely populated with no apparent air quality problems. This area is not classified for air quality attainment status (C. Cain, pers. comm., 1997).

PROPOSED ACTION:

- 2(a) Impacts to air quality from fence construction and road use may result in short-term minor increases in particulate matter in ambient air.
- Odor problems may result from waste management practices in areas where elk concentrate to feed. However, there is only one residence within a 1-mile radius of the Green Velvet game farm; this residence is located approximately ½-mile downstream of the game farm site. Therefore, odor problems should be minor to nonexistent.

NO ACTION:

No impacts to air quality are expected to result from the No Action Alternative.

CUMULATIVE EFFECTS:

No additional impacts from past, present or reasonably foreseeable activities near the proposed game farm are anticipated.

COMMENTS:

Dust and odor are not expected to be of concern at the proposed game farm site due to the distance to the nearest residence and sparse population in this area. If dust and/or odor problems arise, mitigation measures can be implemented.

Required Stipulations: None.



Recommended Mitigation Measures:

- 2(a) Dust management activities include spraying water on unpaved roads during the dry season, vegetating exposed ground where possible, protecting fill piles from wind erosion, and limiting ground disturbance to only the area necessary to complete the job.
- 2(b) Employ the following best management practices (BMPs) to reduce odor problems if they occur: (1) incorporate waste into soil quickly by plowing or discing; (2) spread waste during cool weather or in the morning during warm, dry weather; and (3) cover buried animal carcasses on the game farm with a minimum of 2 feet of soil and at a distance greater than 1-mile from any residence; carcasses may also be sent to a licensed municipal landfill if approved by the landfill operator; carcasses should not be disposed of in or adjacent to water bodies, roads, and ditches. These and other BMPs are described in "Guide to Animal Waste Management and Water Quality Protection in Montana" (DEQ 1996).

REFERENCES:

Cain, Cyra, 1997. Personal communication with Ms. Cyra Cain, Air Quality Bureau, Montana Department of Environmental Quality. May 1997.

Montana Department of Environmental Quality (DEQ), 1996. Guide to Animal Waste Management and Water Quality Protection in Montana. Helena, MT.



3. WATER RESOURCES		Potentia	al Impact		Can Impact be Mitigated	Comment Index
Would Proposed Action result in:	Unknown	None	Minor	Significant		
a. Discharge into surface water or any alteration of surface water quality including but not limited to temperature, dissolved oxygen or turbidity?					Yes	3(a)
b. Changes in drainage patterns or the rate and amount of surface runoff?					Yes	3(a)
c. Alteration of the course or magnitude of flood water or other flows?						
d. Changes in the amount of surface water in any water body or creation of a new water body?						
e. Exposure of people or property to water related hazards such as flooding?						
f. Changes in the quality of groundwater?					Yes	3(f)
g. Changes in the quantity of groundwater?						
h. Increase in risk of contamination of surface or groundwater?					Yes	3(f)
i. Violation of the Montana non- degradation statute?						
j. Effects on any existing water right or reservation?						
k. Effects on other water users as a result of any alteration in surface or groundwater quality?						
I. Effects on other water users as a result of any alteration in surface or groundwater quantity?						

AFFECTED ENVIRONMENT:

The 35-acre proposed game farm area is located on relatively flat pasture/grass rangeland. A small portion of the proposed game farm site is forested. Telegraph creek is a small perennial stream located along the west side of the proposed game farm enclosure (**Figure 4**). The southwest corner of the game farm would include a short segment of the creek (approximately 300 feet) that would be accessible to the domestic elk. During a May 1997 site visit, Telegraph Creek was flowing at an estimated rate of about 200 gallons per minute.

Some areas near Telegraph Creek have seeps on the ground surface due to high groundwater levels and surface water runoff during the spring period; these areas become drier after the spring runoff period. Wetland/riparian areas (primarily willow vegetation) exist along portions of Telegraph Creek; however, most of these areas are outside the proposed game farm area. Stock water would be supplied to the domestic elk from Telegraph Creek and from developed springs on the property.



PROPOSED ACTION:

- 3(a) As stated in the Land Resources section, areas of saturated soil tend to exacerbate the loss of soil structure due to low soil strength characteristics. Therefore, increased runoff and erosion from greater disturbance would occur from the domestic elk. Runoff from the 35-acre area could reach Telegraph Creek adjacent to the game farm during major precipitation events, resulting in increased sedimentation. Due to the relatively small area considered for the Proposed Action, any impacts that would occur due to increased erosion and runoff are considered to be minor.
- 3(f) Domestic elk fecal matter and nutrient-enriched water could affect the quality of groundwater and surface water in the vicinity of the game farm, primarily during periods of snowmelt and major precipitation events. The southwest corner of the game farm enclosure would allow direct access of elk to Telegraph Creek. This area probably would have increased stream bank and bed erosion, which may lead to widening of the stream channel, higher water temperatures, increased evaporation, and faster runoff. The proposed enclosure would not include most of the wetland/riparian areas along the creek in this area; therefore, potential impacts to wetlands are expected to be minor.

No well logs were available from Montana DNRC and MBMG records. The apparent shallow depth to groundwater in the game farm area, especially near Telegraph Creek, would allow groundwater to be susceptible to quality impacts from the elk fecal matter. There are some surface water rights for Telegraph Creek and some springs in the drainage for irrigation and stock purposes; however, no impacts are expected on these water rights from the game farm operation.

NO ACTION:

Current hydrologic conditions are not expected to change under the No Action Alternative.

CUMULATIVE EFFECTS:

No plans for major housing development, new road-building, or logging have been submitted for the cumulative effects study area. Therefore, no cumulative effects from past, present, or reasonably foreseeable activities near the proposed game farm are anticipated.

COMMENTS:

The DEQ administers and enforces water quality laws (e.g., Clean Water Act and Montana Water Quality Act) relating to pollution from point and nonpoint sources. Facilities that qualify as "concentrated animal feeding operations" (CAFO) are considered point sources of pollution and may require permits under Title 75, Chapter 5, Part 6, MCA, and ARM 17.30.1330 (also see 40 CFR § 122.23 and Appendix B to Part 122). Facilities that allow game farm animals access to surface water or that contaminate runoff to surface or groundwater may be considered nonpoint sources of pollution and are subject to the prohibitions against pollution and nondegradation of state water (Title 75, Chapter 5, Parts 3 & 6, MCA, and ARM 17.30.701 et seq.). Nonpoint sources of pollution are considered "nonsignificant" sources of degradation where reasonable land, soil, and water conservation practices are applied and existing and anticipated beneficial uses will be fully protected (ARM 17.30.716). Facilities that cause "significant" changes in water quality must apply to DEQ for authorization to degrade and undergo a nondegradation review to evaluate the nature of the discharge in relation to the quality of the receiving water.

Due to potential minor impacts identified above from increased erosion, sedimentation, elk fecal matter, and proximity to Telegraph Creek, several mitigation measures are recommended. Other water quality protection practices may be required by DEQ if it is determined that a CAFO permit is necessary. Refer to "Guide to Animal Waste Management and Water Quality Protection in Montana" (DEQ 1996) and "Common Sense and Water Quality, A Handbook for Livestock Producers" (Montana Department of Health and Environmental Sciences, 1994) for further information on mitigation measures and CAFO permits. The following management practices are recommended to minimize the risk of discharging pollutants to state water:



Required Stipulations: None.

Recommended Mitigation Measures:

3(a) Minimize stock traffic in saturated soil areas during the spring when groundwater and surface water levels are highest.

Control surface water runoff discharges to Telegraph Creek by employing best management practices (BMPs) along the fence line where surface water could directly enter the creek. The BMPs may include earth berms, straw bale dikes, vegetative buffer zones, and/or silt fences.

Maintain a reasonable stocking rate in the proposed game farm area to mitigate potential impacts from erosion and fecal matter. Potential water quality impacts also could be minimized by moving dead animals and excess fecal material away from Telegraph Creek and burying the animals and composting the fecal matter (disposal must meet county regulations for solid waste). A "reasonable stocking rate" is defined on the first page of *Part II - Environmental Review*.

Place crushed rock, gravel or other appropriate armor material on the bank and bed of Telegraph Creek where domestic elk would have access to the stream in the southwest corner of the game farm. This would prevent or minimize trampling, erosion, and sedimentation. A water gap also could be constructed to narrow the area that domestic elk could directly access the creek. The following permits may be required prior to working in or near Telegraph Creek: "310 Permit" from local Conservation District for physical disturbance to bed/bank; "404 Permit" from U.S. Army Corps of Engineers for dredge/fill of channel and wetlands; and/or "3A Authorization" from Montana DEQ for short-term exceedence of water quality standards. The Montana DEQ could require that Telegraph Creek be excluded from the game farm enclosure if the stocking rate causes excessive disturbance to the creek.

Locate the segment of game farm perimeter fence that would be adjacent to Telegraph Creek at least 25 feet from the edge of the channel to prevent direct impacts to the banks and wetland areas adjacent to the creek. This mitigation would not apply to the southwest corner of the game farm that would enclose a portion of Telegraph Creek.

REFERENCES:

Montana Bureau of Mines and Geology (MBMG), 1997. Computer file search of well logs. Butte MBMG office. May 1997.

Montana Department of Environmental Quality (DEQ), 1996. Guide to Animal Waste Management and Water Quality Protection in Montana. Helena, MT.

Montana Department of Health and Environmental Sciences (DHES), 1994. Common Sense and Water Quality, A Handbook for Livestock Producers. Water Quality Division. Helena, MT.

Montana Department of Natural Resources and Conservation (DNRC), 1997. Computer file search of water rights. Helena DNRC field office. May 1997.



4. VEGETATION		Potentia	al Impact		Can Impact	
Would Proposed Action result in:	Unknown	None	Minor	Significant	be Mitigated	Comment Index
a. Changes in the diversity, productivity or abundance of plant species?					Yes	4(a)
b. Alteration of a plant community?					Yes	4(a)
c. Adverse effects on any unique, rare, threatened, or endangered species?						4(c)
d. Reduction in acreage or productivity of any agricultural land?					Yes	4(a)
e. Establishment or spread of noxious weeds?					Yes	4(e)

AFFECTED ENVIRONMENT:

There are four vegetation types present within the proposed game farm area: pasture, willow/sedge, big sagebrush/grass, and lodgepole pine/grouse whortleberry. The pasture has been planted to introduced pasture species for many years, the most recent planting being approximately 10 years ago. The willow/sedge community is located along a short section of Telegraph Creek in the southwest corner of the proposed pasture. Drier portions of this type are populated with willow and shrubby cinquefoil. The big sagebrush type has an understory primarily of introduced grass, with a diversity of native forbs and shrubs. The lodgepole pine/grouse whortleberry type is on the east side of the proposed pasture. The forest type was recently thinned, with canopy cover now in the 30 to 50 percent range. While thinning may change the understory species composition and increase the forage potential of this type, forage potential is still low. Pfister (1977) indicates that elk lightly use this forest type.

PROPOSED ACTION:

- There is approximately 1.7 months of forage for 40 elk, or 9.4 months of forage for 7 elk (applicant's proposed initial stocking rate). Continuous use of the pastures by seven elk would probably produce minor long-term changes in vegetation productivity and/or diversity over time. Even with supplemental feed, a maximum stocking rate of 40 elk would produce vegetative degradation over time, particularly in the willow/sedge, forest, and sagebrush vegetation types, resulting in decreased vegetation production, reduced ground cover and species diversity, increased soil erosion, and invasion of noxious weeds. The willow component of the willow/sedge type is presently very stunted, with few plants present along the creek within the proposed enclosure. Willow would be subject to year-round browsing, and probably result in reduction or complete elimination of the shrub component in that type. Palatable shrubs in the big sagebrush and lodgepole pine types would be similarly impacted. Trees would be subject to rubbing by elk, which may eventually damage or kill trees.
- 4(c) Based on field reconnaissance and Montana Natural Heritage Program information, there do not appear to be any sensitive plant species within the proposed game farm.
- There are presently few weeds on the proposed game farm site. Spotted knapweed is present in very small numbers at one location which is watched and treated with herbicides and hand-pulling as needed (C. Perry pers. comm., 1997). In the vicinity of the proposed game farm, weed numbers are low. The drainage west of the proposed game farm is heavily infested with spotted knapweed, with lesser



amounts of leafy spurge and musk thistle. If existing vegetation is heavily disturbed by continuous over-utilization, weeds could invade from this or other seed sources (B. Carlson, pers. comm., 1997).

NO ACTION:

The No Action Alternative would result in no change in existing vegetation.

CUMULATIVE EFFECTS:

No additional impacts from past, present and reasonably foreseeable activities in the vicinity of the proposed game farm are anticipated.

COMMENTS:

Required Stipulations:

None.

Recommended Mitigation Measures:

4(a)(e) Effects on vegetation from the Proposed Action can be mitigated by using a reasonable stocking rate that maintains vegetative and soil resources over time, establishing a rest-rotation grazing system within the 35-acre game farm area as elk numbers increase, feeding only certified weed-seed-free hay or pellets, and developing a weed control plan in conjunction with the Butte-Silver Bow Weed Control District. Irrigation and planting in highly disturbed areas would extend the life of the existing pasture, stabilize soil, and provide ongoing areas of new forage for elk grazing.

REFERENCES:

Carlson, B., 1997. Weed Supervisor, Butte-Silver Bow Weed District, Butte, MT. Personal communication June 4, 1997.

Perry, C., 1997. Property owner, proposed Green Velvet Game Farm. Personal communication, May 24, 1997.

Pfister, R.D., B. L. Kovalchik, S.F. Arno, and R.C. Presby, 1977. Forest habitat types of Montana. USDA Forest Service General Technical Report INT-34, Intermountain Forest and Range Experiment Station, Ogden, UT. 174 p.



5. FISH AND WILDLIFE		Potentia	al Impact		Can Impact	_
Would Proposed Action result in:	Unknown	None	Minor	Significant	be Mitigated	Comment Index
a. Deterioration of critical fish or wildlife habitat?					Yes	5(a)
b. Changes in the diversity or abundance of game species?					Yes	5(b)
c. Changes in the diversity or abundance of nongame species?						
d. Introduction of new species into an area?						
e. Creation of a barrier to the migration or movement of animals?					Yes	5(e)
f. Adverse effects on any unique, rare, threatened, or endangered species?					Yes	5(f)
g. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest or other human activity?						
h. Increased risk of contact between game farm animals and wild game?					Yes	5(h)
i. Increased risk to wildlife health from disease?					Yes	5(i)

AFFECTED ENVIRONMENT:

The Proposed Action plans to place up to 40 domestic elk on 35 acres of meadow habitat (70%) and lodgepole pine habitat (30%). This area is excellent summer and fall habitat for mule deer and elk, but this habitat is widely distributed and is not critical for any big game species inhabiting this area (**Figure 3**). The wild deer, elk, and moose living in this area generally winter at a lower elevation several miles to the south of the proposed game farm. Black bear and mountain lions inhabit the general area. The gray wolf is a federally-listed threatened species that is documented to inhabit nearby areas.

PROPOSED ACTION:

The Proposed Action would not result in a significant loss of habitat for big game species because of the limited size of the enclosure. Domestic elk will have direct access to Telegraph Creek in the southwestern corner of the enclosure. Although Telegraph Creek may have once been suitable habitat for westslope cutthroat trout, it has been channelized on its lower portion, has at least one rock passage barrier, and is dewatered for irrigation purposes during summer; therefore, this creek probably is no longer suitable habitat for cutthroat trout. Some input of nutrient-enriched water runoff (effluence) during snowmelt and major storm events may occur, but the Telegraph Creek/Browns Gulch watershed already has a large number of wintering livestock and effluence from the game farm will not significantly change water quality for the brook trout fisheries that is present in this drainage system.



- Black bear and mountain lions may be attracted to the game farm due to concentration of domestic elk (both species) and grain stored for elk feed (black bear). Both species are capable of entering the enclosure and, although live capture and removal is possible, it is not without risks. This may affect individual animals, but not populations. There is a possibility that wild deer and elk may enter the enclosure. Wild ungulates exposed to domestic elk would likely be destroyed, rather than released back to the wild. This would affect individual animals, but not populations.
- 5(e) The 35-acre enclosure may alter local movement of some individual wild deer, elk or moose, forcing them to reroute their daily movement around the exterior enclosure fence. However, due to the limited size of the enclosure and the gently sloping topography at this site, this will not be a significant impact.
- Domestic elk concentrated within the enclosure may serve as an attractant to wolves. Non-lethal removal of a trespassing wolf is possible. Disposition of a trespassing wolf would be according to protocol established by the U.S. Fish and Wildlife Service. Individual gray wolves may be effected by the Proposed Action, but it would not jeopardize long-term population persistence of wolves in Idaho and Montana. Other Federally-listed wildlife species with some potential to pass through this area include the grizzly bear, bald eagle, and peregrine falcon. There is a low likelihood for individuals of any of these species to be impacted by the Proposed Action.
- 5(h) The potential for soil shrink-swell and frost-heaving could cause minor damage to fences resulting in a perimeter fence that is not game-proof. The game farm operator resides at the site and, therefore, would be capable of adequate monitoring of fence integrity and ingress/egress events.
- There is an undetermined potential of domestic elk carrying or becoming infected with a contagious wildlife disease or parasite such as tuberculosis, chronic wasting disease, or meningeal worm and then coming in contact (through-the-fence, nose-to-nose, nose-to-soil, or ingress/egress) with wild deer, elk, or other wildlife. Release of a contagious disease in the wild could severely impact native wildlife populations. It is also possible that diseases and parasites carried by wild elk could be introduced to domestic elk with equally severe impacts. Ingress of wild elk, deer, and moose likely would result in the destruction of the trespassing animals.

NO ACTION:

No wildlife related impacts are expected to occur under the No Action Alternative. The area would probably continue to be used for summer and fall cattle grazing.

CUMULATIVE EFFECTS:

No additional impacts from past, present and reasonably foreseeable activities in the vicinity of the proposed game farm are anticipated.

COMMENTS:

One stipulation is required to reduce potential significant impacts from ingress/egress. Other mitigation measures are recommended to minimize potential impacts to free-ranging fish and wildlife species.

Required Stipulations:

Report ingress of any wild game animals and predators (i.e., bear, lion, and coyote) or egress of domestic elk to the Montana FWP within 24 hours. The report must contain the probable reason why or how ingress/egress occurred.

The above stipulation is imposed to mitigate potentially significant risk to wildlife health posed by the proposed game farm. Risk to wildlife health from contact between game farm animals and wild game is potentially significant due to the following factors:



- the site would be located in an area currently utilized by wild game;
- fencing would cross hilly terrain, increasing the risk of wild deer jumping the fence; and
- inadequate plans to address ingress of wild animals (see Section 5 of Part II in this EA).

Information required by the stipulation in the event of ingress or egress would help both the applicant and FWP to address ingress/egress and to minimize contact between wild and domestic animals. This stipulation, in addition to existing FWP fencing and wildlife protection requirements, would effectively reduce the risk to wildlife to below significant.

Recommended Mitigation Measures:

- 1. Store hay, feed, and salt away from exterior fences or enclose in buildings.
- 2. Feed game farm animals at interior portions of the enclosure and not along the perimeter fence.
- 3. Remove dead animals, excess fecal material, and waste feed from the game farm and deposit at an approved site not likely to be used by humans, domestic animals, and wild animals. Alternatively, dead animals could be buried (minimum depth of 2 feet) and fecal material could be composted on site in areas away from Telegraph Creek. Disposal must meet county regulations for solid waste.
- 4. Inspect exterior game farm fence on a regular basis and immediately after events likely to damage fence to ensure its integrity with respect to trees, frost-heaving, corrosion, burrowing animals, predators, and other game animals.
- 5. If fence integrity or ingress/egress becomes a problem, adjust the fence as necessary, including double fencing, increased post support, replacing damaged posts, or increased fence height.
- 6. During winters of exceptional snow cover, remove snow on either side of the perimeter fence to prevent ingress/egress, or keep game farm animals away from fence areas where significant snow buildup occurs.
- 7. Risk of disease epidemic or heavy parasite infections among domestic elk can be minimized by maintaining a reasonable domestic elk stocking rate in relation to the enclosure size, and management of manure in accordance with DEQ (1996) guidance.

REFERENCES:

Montana Department of Environmental Quality (DEQ), 1996. Guide to Animal Waste Management and Water Quality Protection in Montana. Helena, MT.



6. NOISE EFFECTS	Potential Impact				Can	
Would Proposed Action result in:	Unknown	None	Minor	Significant	Impact be Mitigated	Comment Index
a. Increases in existing noise levels?					Yes	6(a)
b. Exposure of people to severe or nuisance noise levels?						

AFFECTED ENVIRONMENT:

Little noise occurs in the general game farm area because of the sparse population and lack of other activities in this area that would generate noise.

PROPOSED ACTION:

6(a) The Proposed Action would result in a minor short-term increase in existing noise levels from fence construction, land clearing, and other activities conducted to develop the game farm. The nearest residence to the proposed game farm is located approximately ½-mile to the southeast in Telegraph Gulch.

NO ACTION:

No impacts to existing noise levels are expected from the No Action Alternative.

CUMULATIVE EFFECTS:

No additional impacts from past, present or reasonably foreseeable activities near the proposed game farm are anticipated.

COMMENTS:

Due to the distance to the nearest residence and overall sparse population in the area, noise generated from the game farm operation should not cause a problem. If noise concerns are raised, mitigation measures can be employed.

Required Stipulations: None.

Recommended Mitigation Measures:

6(a) Impacts to neighbors from construction noise can be reduced by limiting noisy activities to daylight hours and completing construction as soon as possible.



7. LAND USE		Potentia	al Impact	Can Impact		
Would Proposed Action result in:	Unknown	None	Minor	Significant	be Mitigated	Comment Index
a. Alteration of or interference with the productivity or profitability of the existing land use of an area?					Yes	7(a)
b. Conflict with a designated natural area or area of unusual scientific or educational importance?						
c. Conflict with any existing land use whose presence would constrain or potentially prohibit the Proposed Action?						
d. Conflict with any existing land use that would be adversely affected by the Proposed Action?						
e. Adverse effects on or relocation of residences?						

AFFECTED ENVIRONMENT:

The principal land use of the proposed game farm area and vicinity is a combination of pasture land and forest (**Figure 4**). The area is not zoned for a specific use and is currently utilized by wild game.

PROPOSED ACTION:

The proposed game farm would be consistent with existing land uses. It could potentially be developed for residential use; however, this area has a 40-acre density requirement (D. Skrukrud, pers. comm., 1997). The use of the proposed game farm area for an elk farm may increase the value of the land.

NO ACTION:

If the proposed game farm area is not developed, use of the site would likely continue for cattle pasture.

CUMULATIVE EFFECTS:

Land use described in the Proposed Action is consistent with existing land use in the vicinity of the proposed game farm area. Because no proposals or applications for future development in the vicinity of the proposed game farm are currently on file with Butte-Silver Bow County (D. Skrukrud, pers. comm., 1997), and no past or present activities have adversely affected the game farm area, no potential cumulative effects on land use from the Proposed Action and past, present and reasonably foreseeable actions to land use are anticipated.

COMMENTS:

Because impacts to land use are none to potentially positive, no mitigation measures are recommended.

REFERENCES:

Skrukrud, Dori, 1997. Personal communication with Ms. Dori Skrukrud, assistant planning director, Butte-Silver Bow Planning Department. June 1997.



8. RISK/HEALTH HAZARDS		Potentia	al Impact		Can Impact	
Would Proposed Action result in:	Unknown	None	Minor	Significant	be Mitigated	Comment Index
a. Risk of dispersal of hazardous substances (including, but not limited to chemicals, pathogens, or radiation) in the event of an accident or other forms of disruption?					Yes	8(a)
b. Creation of any hazard or potential hazard to domestic livestock?						
c. Creation of any hazard or potential hazard to human health?						

PROPOSED ACTION:

8(a) Spread of a contagious wildlife disease from game farm animals may directly or indirectly (depending upon nature of the disease) affect the human environment by reducing the number of wild deer and elk available for hunting, or expose hunters to diseases that are contagious to humans as well.

NO ACTION:

No impacts or risks would occur from health hazards under the No Action Alternative.

CUMULATIVE EFFECTS:

No additional impacts from past, present or reasonably foreseeable activities near the proposed game farm are anticipated.

COMMENTS:

Required Stipulations:

None.

Recommended Mitigation Measures:

8(a) The seven standard game farm mitigation measures recommended in Section 5 (Fish/Wildlife) are applicable to this section. In addition, risk of disease epidemic or heavy parasite infections among domestic elk can be minimized by maintaining a reasonable domestic elk stocking rate in relation to the enclosure size, management of manure in accordance with DEQ (1996) guidance, and adherence to disease testing requirements.

REFERENCES:

Montana Department of Environmental Quality (DEQ), 1996. Guide to Animal Waste Management and Water Quality Protection in Montana. Helena, MT.



9. COMMUNITY IMPACT		Potenti	al Impact	Can Impact		
Would Proposed Action result in:	Unknown	None	Minor	Significant	be Mitigated	Comment Index
a. Alteration of the location, distribution, density, or growth rate of the human population of an area?						
b. Alteration of the social structure of a community?						
c. Alteration of the level or distribution of employment or community or personal income?						
d. Changes in industrial or commercial activity?						
e. Changes in historic or traditional recreational use of an area?						
f. Changes in existing public benefits provided by affected wildlife populations and wildlife habitats (educational, cultural or historic)?						
g. Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?						

AFFECTED ENVIRONMENT:

The nearest town to the proposed game farm site is Butte, located approximately 8 miles to the southeast. In addition, the game farm site is located at the end of a private road near the head of Telegraph Gulch.

PROPOSED ACTION:

As a result of the distance to the nearest community, no adverse impacts to the community are expected from the proposed game farm. No employees would be hired as a result of the Proposed Action. While the Proposed Action may increase the income level for the applicant and increase taxes paid to the county, these increases would be relatively minor with respect to the community.

NO ACTION:

No adverse impacts to the community would result from the No Action Alternative.

CUMULATIVE EFFECTS:

No adverse impacts to the community are expected to result from the Proposed Action and past, present and reasonably foreseeable activities in the vicinity of the proposed game farm.

COMMENTS:

No mitigation measures are recommended with respect to community impacts.



HUMAN ENVIRONMENT

10. PUBLIC SERVICES & TAXES	Potential Impact				Can	
Would Proposed Action result in:	Unknown	None	Minor	Significant	Impact be Mitigated	Comment Index
a. A need for new or altered government services (specifically an increased regulatory role for FWP and Dept. of Livestock)?						10(a)
b. A change in the local or state tax base and revenues?						10(b)
c. A need for new facilities or substantial alterations of any of the following utilities: electric power, natural gas, other fuel supply or distribution systems, or communications?						

PROPOSED ACTION:

- 10(a) FWP and DoL would be required to have an increased work load associated with the game farm for fence and animal inspections and monitoring. For this relatively small game farm operation, however, the increased work load is expected to be minor.
- 10(b) Placement of elk would increase the annual tax contribution of the proposed game farm, with collected taxes going toward the county general fund and local school district. For 20 elk, annual taxes would total approximately \$150 to \$500, depending on the number, age and sex of the elk.

NO ACTION:

No additional taxes would be collected from the applicant under the No Action Alternative. The applicant may continue to lease pasture for cattle grazing in the proposed game farm area.

CUMULATIVE EFFECTS:

No adverse cumulative effects to public services, taxes, and utilities are anticipated to result from the Proposed Action and past, present and reasonably foreseeable activities in the vicinity of the proposed game farm.

COMMENTS:

No mitigation measures are recommended with respect to public services, taxes, and utilities.



HUMAN ENVIRONMENT

11. AESTHETICS/RECREATION	Potential Impact			Can Impact		
Would Proposed Action result in:	Unknown	None	Minor	Significant	be Mitigated	Comment Index
a. Alteration of any scenic vista or creation of an aesthetically offensive site or effect that is open to public view?						
b. Alteration of the aesthetic character of a community or neighborhood?						
c. Alteration of the quality or quantity of recreational/tourism opportunities and settings?				-		

AFFECTED ENVIRONMENT:

The game farm site is located at the end of a private road near the head of Telegraph Creek. There is no direct public access to this area for purposes of recreation. The property is generally surrounded on three sides by U.S. Forest Service property.

PROPOSED ACTION:

No adverse impacts to the public view, character of the neighborhood, or recreational opportunities in the area would result from the Proposed Action.

NO ACTION:

No adverse impacts to aesthetics or recreational opportunities in the area would result from the No Action Alternative.

CUMULATIVE EFFECTS:

No additional impacts from past, present and reasonably foreseeable activities near the proposed game farm are anticipated.

COMMENTS:

No mitigation measures are recommended with respect to aesthetics and recreation.



HUMAN ENVIRONMENT

12. CULTURAL & HISTORICAL RESOURCES	Potential Impact			Can Impact		
Would Proposed Action result in:	Unknown	None	Minor	Significant	be Mitigated	Comment Index
a. Destruction or alteration of any site, structure or object of prehistoric, historic, or paleontological importance?					Yes	12(a)
b. Physical change that would affect unique cultural values?						
c. Effects on existing religious or sacred uses of a site or area?						

AFFECTED ENVIRONMENT:

One historic site exists within Section 1 (T04N, R09W) based on a cultural resource file search by the State Historical Preservation Office (SHPO 1997). The site (No. 24DL413) is a historic mining and irrigation system located outside of the proposed game farm area. Four cultural resource inventories have been conducted in this area (SHPO 1997).

PROPOSED ACTION:

12(a) According to SHPO (1997), there is a low likelihood for this project to affect unknown or unrecorded cultural properties.

NO ACTION:

No impacts to unknown cultural resources are expected from the No Action Alternative unless other disturbances occur within the property.

CUMULATIVE EFFECTS:

No additional impacts from past, present and reasonably foreseeable activities near the proposed game farm are anticipated.

COMMENTS:

Required Stipulations:

None.

Recommended Mitigation Measures:

12(a) If archeological artifacts are observed during construction of the game farm fence or from other activities, work should stop in the area and the discovery reported to:

Montana Historical Society Historic Preservation Office 1410 8th Avenue; P.O. Box 201202 Helena, Montana 59620 (406) 444-7715



If work stoppage in the area containing observed artifacts is not possible, record the location and position of each object, take photographs, and preserve the artifact(s).

REFERENCES:

Montana State Historic Preservation Office (SHPO), 1997. Letter from Phillip Melton (SHPO, Helena, MT) to Doug Rogness (Maxim Technologies, Inc.), dated May 27, 1997.



SUMMARY

13. SUMMARY	Potential Impact				Can		
Would the Proposed Action, considered as a whole:	Unknown	None	Minor	Significant	Impact be Mitigated	Comment Index	
a. Have impacts that are individually limited, but cumulatively considerable? (A project or program may result in impacts on two or more separate resources which create a significant effect when considered together or in total.)					Yes	13(a)	
b. Involve potential risks or adverse effects which are uncertain but extremely hazardous if they were to occur?					Yes	13(b)	
c. Potentially conflict with the substantive requirements or any local, state, or federal law, regulation, standard or formal plan?							
d. Establish a precedent or likelihood that future actions with significant environmental impacts would be proposed?							
e. Generate substantial debate or controversy about the nature of the impacts that would be created?					Yes	13(e)	

PROPOSED ACTION:

- 13(a) Year-long use of the enclosure by 40 elk probably would result in more nutrient-enriched runoff into Telegraph Creek/Browns Gulch than the existing conditions of summer/fall cattle grazing. A significant number of cattle already winter in Browns Gulch and have direct access to the creek. The addition of this runoff water quality from the proposed game farm probably would be minor when compared to impacts already occurring to this drainage system by domestic cattle.
- There is an undetermined potential of domestic elk carrying or becoming infected with a contagious wildlife disease or parasite such as tuberculosis, chronic wasting disease, or meningeal worm and then coming in contact (through-the-fence, nose-to-nose, nose-to-soil, or ingress/egress) with wild deer, elk, or other wildlife. Release of a contagious disease in the wild could severely impact native wildlife populations. It is also possible that disease and parasites carried by wild elk could be introduced to domestic elk with equally severe impacts. Ingress of wild elk, deer, and moose would likely result in the destruction of the trespassing animals.

Spread of a contagious wildlife disease may directly or indirectly (depending on the nature of the disease) affect the human environment by reducing the number of wild deer and elk available for hunting, or exposing hunters to diseases that are contagious to humans as well.

- 13(e) The nature of impacts to wildlife from elk game farms is currently under debate in Montana and other states. The following issues are of the greatest concern:
 - Disease transmission from game farm elk to wildlife is possible if the game farm elk are diseased and have an opportunity to come into contact with wild elk or deer.



- Hybridization of Montana's game species resulting from the ingress/egress of animals on game farms.
- Potential for wild animals to ingress into the game farm. Ingressing elk and deer are generally killed, typically by FWP wardens, to prevent potential disease transmittal.
 Ingressing mountain lions and black bears may be immobilized and removed.
- Theft of wild animals for financial gain on game farms.

These issues are particularly controversial when game farms block migration routes or consume significant areas of land historically utilized by wild game. Inadequate perimeter fencing and fence monitoring on the part of the game farm operator can also lead to ingress and egress events and nose-to-nose contact between wild game and game farm animals. Because the proposed Green Velvet game farm area is too small to effectively block big game migration routes or consume a significant portion of land utilized by wild game, and because the proposed perimeter fence is determined to be adequate for the size, location and type of game farm, the controversial nature of the Proposed Action is minor.



SUMMARY EVALUATION OF SIGNIFICANCE CRITERIA

a. Does the Proposed Action have impacts that are individually minor, but cumulatively considerable?

(A project may result in impacts on two or more separate resources which create a significant effect when considered together or in total.)

No. However, year-long use of the enclosure by 40 elk would result in more nutrient-enriched runoff into Telegraph Creek/Browns Gulch than the existing conditions of summer/fall cattle grazing. A significant number of cattle already winter in Browns Gulch and have direct access to the creek. The addition of this runoff water quality from the proposed game farm would be less than significant when compared to impacts already occurring to this drainage system by domestic cattle.

b. Does the Proposed Action involve potential risks or adverse effects which are uncertain but extremely hazardous if they were to occur?

Yes. An unlikely, but extremely hazardous event should it occur, would be the spread of a disease or parasite from domestic elk to wild elk, deer, or moose. The risk of this event occurring can be reduced by following the mitigation measures listed in Sections 5 and 8 (Fish/Wildlife and Risk/Health Hazards, respectively).

c. Description and analysis of reasonable alternatives (including the No Action Alternative) to the Proposed Action whenever alternatives are reasonably available and prudent to consider and a discussion of how the alternatives would be implemented:

No Action Alternative: The No Action Alternative would avoid all potential impacts listed above. This site would likely be grazed by domestic cattle, horses, or other livestock should the No Action Alternative be selected. The No Action Alternative probably would not result in exclusion of wildlife from this site.

d. Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency:

This section provides an analysis of impacts to private property by proposed restrictions or stipulations in this EA as required under 75-1-201, MCA, and the Private Property Assessment Act, Chapter 462, Laws of Montana (1995). The analysis provided in this EA is conducted in accordance with implementation guidance issued by the Montana Legislative Services Division (EQC 1996). A completed checklist designed to assist state agencies in identifying and evaluating proposed agency actions, such as imposed stipulations, that may result in the taking or damaging of private property, is included in **Appendix B**. Mitigation measures described in this section address both minor and significant impacts. FWP will require stipulations to mitigate all potentially significant impacts from the Proposed Action. Potential minor impacts from the Proposed Action are addressed as mitigation measures that are strongly recommended, but not required.

Required Stipulations

Report the ingress of any wild game animals and predators (i.e., bear, lion, and coyote) or egress of domestic elk to FWP within 24 hours. The report must contain the probable reason why or how ingress/egress occurred.



Restriction on Private Property Use

This stipulation restricts the use of private property by effectively requiring that the proposed game farm be monitored at least once every 24 hours for ingress or egress events. The stipulation is consonant with the current FWP requirement to report egress events immediately [ARM 12.6.1517(2)].

Alternatives

Report ingress and egress events to FWP within a time period greater than 24 hours.

This stipulation would not adequately address the significant risk to wildlife health. Ingressing wild animals must be detected immediately to prevent contact with wild game after contact with game farm animals.

Benefits from Imposing the Stipulation

This stipulation is imposed to mitigate potentially significant risk to wildlife health posed by the proposed game farm. Risk to wildlife health from contact between game farm animals and wild game is potentially significant due to the following factors.

- the site would be located in an area currently utilized by wild game;
- fencing would cross hilly terrain, increasing the risk of wild deer jumping the fence;
- inadequate plans to address ingress of wild animals; and
- frost-heaving in this area can compromise the integrity of the fence.

Information provided by the stipulation would help the applicant and FWP to address ingress and egress incidents and to minimize contact between wild and domestic animals. This stipulation, in addition to existing FWP fencing and wildlife protection requirements, would effectively reduce the risk to wildlife health to below significant.

Types of Expenditures the Stipulation Would Require

The stipulation to require 24-hour notice of ingress and egress events would not impose any additional expenditures beyond those necessary to immediately report egress events in accordance with ARM 12.6.1517(2).

Stipulation's Effect on Property Values

None.



PART III. NARRATIVE EVALUATION AND COMMENT

Wildlife use of the area and potential for through-the-fence contact with game farm animals (consider year-around use, traditional seasonal habitat use, and location of travel routes and migration corridors).

Through-the-fence contact: The proposed game farm is located in moderate density deer, elk, and moose summer range habitat. No significant big game winter range is located in this area. If wild deer, elk, and/or moose pass through this area, there is potential for nose-to-nose contact through the enclosure fence. Nose-to-nose contact is most likely to occur between wild and domestic elk, and unlikely to occur between domestic elk and wild deer or moose. In addition, wild elk may be attracted to domestic elk during the rut. Transmission of disease or parasites may occur during nose-to-nose contact, nose-to-body contact, and by contacting vegetation and feces along the fence line. Disease transmission may occur from wild ungulates to domestic elk and from domestic elk to wild ungulates. Risk of disease transmission can be reduced by maintaining the integrity of the enclosure fence, by maintaining a healthy domestic elk population, and by following the previously-listed mitigation measures.

Potential for escape of game farm animals or ingress of wildlife (consider site-specific factors that could reduce the effectiveness of perimeter fences built to standards outlined in ARM 12.6.1503A, including steepness of terrain, winter snow depths/drifting, susceptibility of fences to flood damage, etc.).

Fence integrity: The proposed fence would consist of 8-foot high, 6-inch mesh, high-tensile big game fencing; supported by 3-inch diameter steel pipe driven approximately 3.5 feet into the ground. Fence posts would be spaced at 20-foot intervals. The proposed enclosure site is located on relatively flat to moderately sloped terrain that should pose no fencing problems. Approximately one-third of the game farm pasture includes forested habitat, and there is a possibility of falling trees breaking the integrity of the enclosure fence. The likelihood of a serious fence breach by falling trees would be reduced by clearing a path on either side of exterior fences in the forested areas.

The proposed enclosure site is located at an elevation of 6,200 feet and the expected snow levels are normally around 2 feet, with a maximum potential for 3 to 4 feet. Some drifting of snow is expected in the meadow area, but in general, this valley is sheltered from high winds by the topography and lodgepole pine forest. Under extreme conditions of snow cover, the height of the fence above compacted snow level may be sufficiently reduced to permit ingress of wild ungulates into the enclosure to gain access of supplemental feed. However, few wild deer and elk would be expected to use this area during winters of exceptional snowfall. Domestic elk may also be able to leave the enclosure during periods of excessive snow cover, and removal of snow drifts from either side of the fence in drift prone areas may be necessary during winter.

Proportion (%) of the total habitat area currently used by wildlife that would be enclosed or otherwise impacted.

The game farm enclosure would exclude resident wild deer only from a minor portion of the total area that is suitable habitat. The cutting of some trees to accommodate the enclosure would not influence wild deer use of this area. Other wildlife species are not expected to be affected by the proposed 35-acre enclosure.



PART IV. EA CONCLUSION

1. Based on the significance criteria evaluated in this EA, is an EIS required? YES / NO

No. The appropriate level of analysis for the Proposed Action is a mitigated EA because:

- all impacts of the Proposed Action have been accurately identified in the EA; and
- all identified significant impacts would be mitigated to minor or none.
- 2. Describe the level of public involvement for this project if any and, given the complexity and the seriousness of the environmental issues associated with the Proposed Action, is the level of public involvement appropriate under the circumstances?

Upon completion of the Draft EA, a notice is sent to adjoining landowners, local newspapers, and other potentially affected interests, explaining the project and asking for input during a 24-day comment period which extends from July 15 through August 8, 1997. The Draft EA is also available to the public from the FWP office in Missoula at the address and phone listed below and in the *Introduction* section of this EA, and through the State Bulletin Board System during the public comment period. A public meeting will be held at the U.S. Forest Service office in Butte, Montana on Wednesday, July 30, 1997, at 7pm during the comment period to solicit verbal comments on the Proposed Action.

- 3. Duration of comment period if any: 24 days
- 4. Name, title, address and phone number of the Person(s) Responsible for Preparing the EA:

Dept. of Fish, Wildlife and Parks

Doug Johnson, FWP Region 2 Game Warden 3201 Spurgin Road Missoula, Montana 59801 (406) 375-9106

Martin Vook, FWP Region 3 Game Warden Route 1, 390 Roosevelt Drive Butte, Montana 59701 (406) 494-5528

Karen Zackheim, FWP Game Farm Coordinator Ashley Schannauer, FWP Legal Counsel

Maxim Technologies, Inc.

Doug Rogness, Project Manager & Hydrologist Alice Stanley, MEPA Specialist Mike Cormier, Soil Scientist Sally Staley, GIS and Graphics

FaunaWest Wildlife Consultants

Craig Knowles, Wildlife Biologist

<u>Other</u>

Candace Durran, Vegetation Specialist



APPENDIX A FISH, WILDLIFE AND PARKS FENCING REQUIREMENTS



- third copy to purchaser or transferee, which must also accompany the animals to their destination; and
- (d) fourth copy retained by the game farm operator at origin.
- The licensee must account for all bill of (3) sale/transportation receipts.
- (4) Transactions must be recorded in the record book(s) of the affected game farm licensee(s) within five days of the transaction. (History: Secs. 81-3-202, 87-4-422 MCA; IMP, Secs. 87-4-415, 81-3-210, 87-4-422 MCA; NEW, 1992 MAR p. 1017, Eff. 5/15/92.)
- 12.6.1503 FENCING REQUIREMENTS (IS HEREBY REPEALED) (History: Sec. 87-4-422 MCA; IMP, Sec. 87-4-416 MCA; NEW, 1984 MAR p. 250, Eff. 1/27/84; REP, 1992 MAR p. 1017, Eff. 5/15/92.)
- 12.6.1503A FENCING REQUIREMENTS (1) After May 15, 1992, applicants for a game farm license must comply with the following fencing standards:
- (a) Conventional perimeter fences must be, at a minimum, eight feet above ground level for their entire length. The bottom six feet must be mesh of sufficient size to prevent wild animals from entering and game farm animals from escaping. Supplemental wire required to attain a height of 8 feet may be smooth, barbed, or woven wire (at least 12 1/2 gauge) with strands spaced not more than six inches apart.
- Perimeter fences constructed of high tensile wire must be supported by a post or a stay at minimum intervals of 8 feet.
- Conventional perimeter fences must be at least 12 (c) 1/2 gauge woven wire, 14 1/2 gauge high-tensile woven wire, chain link, non-climbable woven fence, or other fence approved by the department of fish, wildlife, and parks.
- (i) If the wire used is not a full 8 feet in height, it must be overlapped one row and securely fastened at every other vertical row or woven together with cable.
- (d) Electric fencing materials may be used on perimeter fences only as a supplement to conventional fencing materials.
- (e) All gates in the perimeter fence must be selfclosing, equipped with two locking devices and installed in locations that have been approved by the department of fish, wildlife, and parks. Double gates may be required at points in the perimeter fence subject to frequent vehicle traffic that is not related to operation of the game farm.
 - (f) Posts used in the perimeter fence must be:



- (i) of material of sufficient strength to keep game farm animals securely contained and wild animals from entering;
 - (ii) extended at least 8 feet above ground level;
- (iii) spaced no more than 24 feet apart with stays or supports at 8 foot intervals between the posts;
 - (iv) braced with wood or with suitable metal material

properly set in concrete, at all corners.

- (2) Game farm perimeter fences in place as of May 15, 1992 that comply with the previously existing 7 1/2 foot height requirement and have been found to be adequate are not subject to the requirements of this rule (1)(a) through (f).
 - (a) If fences do not comply with the previously existing 7 1/2 foot height requirement or when reconstruction or replacement of existing 7 1/2 perimeter fences becomes necessary, they shall be constructed to meet the fencing standards outlined in (1).
 - (3) All open topped enclosures holding game farm carnivores must meet the following requirements:
 - (a) a perimeter fence at least 8 feet in height constructed of at least 9 gauge woven wire chain link or solid material that cannot be destroyed by the species contained therein;
 - (b) the perimeter barrier must be supported by a post or a stay at 10 foot intervals;
 - (c) an overhang of barbed wire or electric wire installed at the top of the perimeter fence or other configuration that precludes escape;
 - (d) buried mesh wire (minimum 11 gauge) extending laterally 3 feet to the inside of the enclosure for the length of the perimeter fence (to prevent carnivores from digging under the fence and escaping);
 - (e) any trees or obstacles that would allow carnivores to exit or enter the enclosure must be removed.
 - (4) All cages holding game farm carnivores must be of sufficient size (height, length and width) to prevent overcrowding and allow exercise and must meet the following requirements:
 - (a) a cage top constructed of at least 11 gauge woven wire or chain link;
 - (b) a floor made of cement or concrete at least 3 inches thick into which metal fence posts are permanently secured or a floor that consists of chain link or similar material that will preclude the animal digging through the floor to escape.
 - (5) Gates on carnivore enclosures and cages must be self-closing and have double locks.



(6) Gates are prohibited in fences that are shared in

common by neighboring game farms.

- (7) The fence must be maintained in a game-proof condition at all times to prevent animals from escaping from or entering the game farm premises. If game farm animals or wild animals do pass through, under, or over the fence for any reason, the licensee must supplement the fence to prevent continued passage. (History: Sec. 87-4-422 MCA; IMP, Secs. 87-4-409, 87-4-422 MCA; NEW, 1992 MAR p. 1017, Eff. 5/15/92.)
- 12.6.1504 REPORTING (IS HEREBY REPEALED) (History: Sec. 87-4-422 MCA; IMP, Sec. 87-4-416 MCA; NEW, 1984 MAR p. 250, Eff. 1/27/84; REP, 1992 MAR p. 1017, Eff. 5/15/92.)
- 12.6.1504A GAME FARM REPORTING (1) Reports must be recorded on the forms provided by the department of fish, wildlife, and parks and must be filled out completely and accurately.
- (2) No pages in the game farm record book may be discarded. Voided pages must be sent to the department of fish, wildlife, and parks (Helena office).
- (3) The annual game farm report must be submitted to the department of fish, wildlife, and parks (Helena office) by January 31.
- (4) Renewal of a game farm license is contingent upon timely and accurate completion and submittal of required

reports.

- (5) Game farm record books and reports must be kept on the premises of the licensed game farm, residence of the game farm operator or manager or his/her principal place of business, so long as that location is within the state of Montana. The designated location of the game farm record books and reports must be declared to the department of fish, wildlife, and parks (Helena office).
- (6) Purchases, sales, escapes, recaptures, deaths and births must be reported in the game farm record book provided by the department of fight wildlife and reports.

by the department of fish, wildlife, and parks.

- (7) Game farm operators are requested to notify the department of fish, wildlife, and parks (regional warden captain), in advance of his/her annual animal census. (History: Sec. 87-4-422 MCA; IMP, Secs. 87-4-417, 87-4-422 MCA; NEW, 1992 MAR p. 1017, Eff. 5/15/92.)
- 12.6.1505 RECOVERY OF ESCAPED ANIMALS (IS HEREBY REPEALED) (History: Sec. 87-4-422 MCA; IMP, Sec. 87-4-416 MCA; NEW, 1984 MAR p. 250, Eff. 1/27/84; REP, 1992 MAR p. 1017, Eff. 5/15/92.)



APPENDIX B PRIVATE PROPERTY ASSESSMENT ACT CHECKLIST



PRIVATE PROPERTY ASSESSMENT ACT CHECKLIST

The 54th Legislature enacted the Private Property Assessment Act, Chapter 462, Laws of Montana (1995). The intent of the legislation is to establish an orderly and consistent process by which state agencies evaluate their proposed actions under the "Takings Clauses" of the United States and Montana Constitutions. The Takings Clause of the Fifth Amendment of the United States Constitution provides: "nor shall private property be taken for public use, without just compensation." Similarly, Article II, Section 29 of the Montana Constitution provides: "Private property shall not be taken or damaged for public use without just compensation..."

The Private Property Assessment Act applies to proposed agency actions pertaining to land or water management or to some other environmental matter that, if adopted and enforced without compensation, would constitute a deprivation of private property in violation of the United States or Montana Constitutions.

The Montana State Attorney General's Office has developed guidelines for use by state agency to assess the impact of a proposed agency action on private property. The assessment process includes a careful review of all issues identified in the Attorney General's guidance document (Montana Department of Justice 1997). If the use of the guidelines and checklist indicates that a proposed agency action has taking or damaging implications, the agency must prepare an impact assessment in accordance with Section 5 of the Private Property Assessment Act. For the purposes of this EA, the questions on this checklist refer to the following required stipulation(s):

Report the ingress of any wild game animals or egress of domestic elk to FWP within 24 hours. The report must contain the probable reason why or how ingress/egress was achieved.

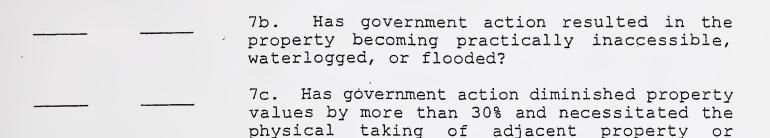


PRIVATE PROPERTY ASSESSMENT ACT CHECKLIST

DOES THE PROPOSED AGENCY ACTION HAVE TAKINGS IMPLICATIONS UNDER THE PRIVATE PROPERTY ASSESSMENT ACT?

YES	ИО	
		1. Does the action pertain to land or water management or environmental regulation cting private real property or water cs?
occupation	 n of	Does the action result in either a permanent or indefinite physical private property?
		3. Does the action deprive the owner of all economically viable uses of the property?
		4. Does the action deny a fundamental attribute of ownership?
 .		5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If the answer is NO, skip questions 5a and 5b and continue with question 6.]
	and divine for any and	5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
***************************************	APP of the same of the same same same	5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
		6. Does the action have a severe impact on the value of the property?
•		7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally? [If the answer is NO, do not answer questions 7a-7c.]
		7a. Is the impact of government action direct, peculiar, and significant?





property across a public way from the property

Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b.

in question?

If taking or damaging implications exist, the agency must comply with § 5 of the Private Property Assessment Act, to include the preparation of a taking or damaging impact assessment. Normally, the preparation of an impact assessment will require consultation with agency legal staff.





